TREATMENT OF NEURASTHENIA

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BY

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PREFACE

In my previous work, *The Psychology of Neurasthenics*, it was my task to analyse psychic disturbances, the mental state, the various manifestations presented by these patients. I now propose, in the present book, to indicate the treatment, the best means by which to relieve and to cure them, according to the knowledge which experience has brought me.

During the fifteen years which I have spent in the practice of diseases of the nervous system, I have had the care of a number of neurasthenics and have had to wrestle with all the difficulties attending these cures, difficulties which I have thus had unceasingly to attempt to solve, calling to my aid all the resources of therapeutics. I have tried, and experimented with, every form of treatment, ancient and modern, every drug, every physical agent. As a result of all these trials I have finished by appreciating each

process, each substance, at its true value, and at the same time by establishing for myself a method and course of action in the treatment of neurasthenics.

What I am about to unfold here is offered as the result of my experience, with the hope that it may prove of some use to practitioners.

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TREATMENT OF NEURASTHENIA

CHAPTER I

WHAT IS A NEURASTHENIC ?

BEFORE entering upon my subject and attacking the therapeutic problem of the neurasthenic, it appears to me essential first to define the type of patient to whom we apply this designation and what we mean by neurasthenic and neurasthenia.

Few words have, indeed, been used so ill-advisedly as these. By the general public and too often even by the medical faculty they are employed without discrimination to designate all sorts of patients, who frequently have nothing in common with neurasthenics : the apprehensive, the obsessed, melancholics, hypochondriacs, those under the influence of auto-suggestion, and neuropaths of every kind. In fact, for many " neurasthenic " has become synonymous with neuropath.

Now this is an absolutely erroneous con-

ception which merely results in adding some little obscurity to an already very delicate and complex question. I am convinced that the majority of discussions which have taken place, and are still continuing, between various authors and different medical schools, have no other origin than in a verbal misunderstanding. In the clinical field do not all good observers agree if they can understand one another? Hence the necessity of restricting the diagnosis of neurasthenia to such patients as legitimately merit it, and of defining as accurately as possible the conception of the neurosis which we keep before us.

This is not a task which appears to me one of great difficulty. Amongst all the types of neuropaths, variable and polymorphous as they are, the neurasthenic stands out with such well-marked characteristics that it is always feasible to trace, even amid the complications with which it may be surrounded, the fundamental nervous state corresponding with his neurasthenia. This neurasthenia is a clinical entity which is not only based upon an indisputable reality, but in addition possesses a sufficiently clear-cut individuality to be unmistakable. For my own part I have never hesitated long in committing myself to a diagnosis. Doubtless a certain perspicacity, a certain refinement of analysis, is necessary; but are not these qualities such as are called for

in all medical practice? With a little judgment, a little experience, one need never hesitate to express one's opinion.

. . . . . .

What, then, is a neurasthenic?

Rather than reply off-hand to this question with a more or less theoretical definition I prefer to give you an instance.

Suppose a man of about forty, who comes into my consulting-room and addresses me as follows: "Doctor, I have come to consult you because I am continually tired and unable to work. When I get up in the morning I am more weary than when I went to bed at night. All day I feel my body tired and my limbs ache; the slightest effort exhausts me; I can no longer take walks nor indulge in any physical exercise. Even standing upright is an effort.

"Moreover, I am tired, not only in the body but in the brain. I constantly feel as though I had a tight band around my skull. My head feels empty; my mind refuses to work; my ideas are confused; and I can no longer fix my attention. My memory is going; when I read I no longer know at the end of the page what I was reading about at the beginning. I forget appointments and facts connected with my business.

"Also I am depressed, bored everywhere and at all times; things that amuse others have no

interest for me. I take pleasure in nothing; on the other hand, I have become morbidly impressionable to painful emotions; I worry about everything; the slightest difficulty frightens me; the least opposition exasperates me.

"As to my will, my energy—I have none left. I no longer know what I want, what I ought to do. I doubt, I hesitate, I dare not come to a decision. I have, in addition, lost my appetite and I sleep badly. Sexual desire is in abeyance.

"Under these conditions I have a dread of the future—if you cannot cure me I do not know what is to happen."

Whilst he is talking to me in this strain I am studying the man attentively. I notice that his face looks tired and drawn, the cheeks are sunken, the complexion is sallow, the eye dull, the expression sad. His voice is flat and toneless. He sits heavily on his chair, his back is bent, his head is bowed. In brief, his whole aspect reveals lassitude and depression.

If now I examine him I find no sign of any organic affection of the nervous system. The reflexes may possibly be a little active. When I listen to his heart it is nervous, beats loudly, and accelerates under emotion. Above all, I find a considerable dilatation of the stomach, with peristaltic movement and tenderness in the hypogastric region.

Observation of the man thus summed up discloses an almost stereotyped portrait of the ordinary everyday neurasthenic, the one most frequently encountered, together with most of the essential signs of neurasthenia.

If we analyse his symptoms we find that the majority of them are manifestations of a diminution in the activity of the central nervous system, indications of weakness, of inadequacy, *e.g.* the difficulty in physical effort and intellectual work, loss of memory, of power of concentration, of will-power, sexual coldness, etc. We thus have the immediate impression, from the first study of our patient, that he is suffering from a diminution of the functional capacity of his nervous system. He is in a state of depression, fatigue, exhaustion.

But, in addition, our patient complains of yet more symptoms which are no longer significant of depression but rather of nervous irritability, *e.g.* hyperæsthesiæ, hyperactivity of reflexes, exaggerated manifestation of emotion, insomnia, etc.

There is then, in reality, in the case of the neurasthenic patient a mixture of symptoms of weakness and irritability, a fact long ago recognised by the sponsor of the neurosis, the American Beard, who on this account named it "irritable weakness."

It may further be affirmed that these signs of weakness and irritability are manifested simultaneously in the various primary functions of the nervous system: motor, sensory, emotional, organic functions, etc.

We shall now study these diverse signs in detail, and therefore must concurrently pass in review the signs of weakness and the signs of irritability in the various functional domains of the nervous system. We shall thus investigate the motor, intellectual, sensory, affective, and organic disorders met with in neurasthenics.

Psycho-motor Disorders. — The psycho-motor disturbances of the neurasthenic consist essentially in a diminution in the capacity for muscular effort accompanied by a sensation of physical fatigue.

This *diminution in the capacity for muscular effort* must be clearly understood. It is not in reality so much a question of a weakening of muscular force as a diminution in the amount of motile energy which the nervous system is able to transmit to the muscle.

If certain neurasthenics give with the dynamometer a figure lower than the normal, there are others, on the contrary, who show a very fair pressure. With them, therefore, the muscle is capable of adequate contraction, and there is in reality no muscular weakness. If, however, the

patient is asked to exert a succession of pressures, the fact may be established that the figures obtained diminish rapidly, and if an average be taken of the results, it will be found that the figure is inferior to that similarly obtained from healthy subjects.

Mosso's ergograph demonstrates these conditions even better than the dynamometer. It can very accurately be shown that, although the first upstrokes are sometimes energetic, their height rapidly decreases, more rapidly than in the case of a normal subject, and that the average height of the tracing is diminished. Thus it is evident that, everything considered, the total effort of which a neurasthenic is capable is lessened.

There is, however, a second factor: *i.e.* the exhaustion, more rapid than normal, of this effort. The different forms of recording apparatus also enable us to estimate this new aspect of fatigue. By means of the dynamometer of Victor Henri, which measures not only the maximum effort but the duration of that effort, we see that this duration in the case of the neurasthenic is below the normal. With Mosso's ergograph the demonstration is even more precise, the number of upstrokes which correspond to the duration of the effort is sensibly diminished.

There is then, in the neurasthenic, a diminu-

tion not only in the effort itself but in its duration. He suffers not only from asthenia but also from rapid exhaustibility; his reserve of energy is more rapidly exhausted than is that of a healthy individual.

There is a third element to be taken into consideration—the slowness of restoration of his energy. Maggiora has shown that normally an interval of ten seconds between two muscular contractions is sufficient to allow the subject of the experiment entirely to recuperate his energy; if a spacing of ten seconds is allowed between the contractions of the ergograph the height of the upstrokes remains approximately equal, and under such conditions work may continue a long time without apparent fatigue. Expressed otherwise, a ten seconds' rest suffices to restore energy and suppress fatigue. In the case of the neurasthenic, however, the same does not hold true. Gilbert-Ballet and Philippe have shown that this interval of ten seconds is in his case insufficient to make up for the fatigue and that the height of the upstrokes gradually diminishes. This experiment provides an expression of the degree of retardation in the return of energy.[1]

To recapitulate, enfeeblement of energy, more rapid exhaustion, more gradual repair, are the

[1] Ballet et Philippe, *Congrès des aliénistes et neurologistes*. Bruxelles, 1903.

three physiological conditions of the motor asthenia of neurasthenics.

This motor asthenia is accompained by a sensation of physical fatigue.

Fatigue is one of the essential symptoms of neurasthenic states. All patients complain with emphasis of this invincible lassitude which overtakes them as soon as they wake in the morning and remains with them the entire day, demanding a considerable effort in order to accomplish the least work.

The physical fatigue of neurasthenics is far more complicated than it appears at first, and includes a certain number of elements which we must dissociate by analysis.

1. In a state of complete repose, of total relaxation, when lying down, the patient already experiences fatigue. In the first place, he has in all his muscles an impression of aching, a bruised feeling, often accompanied by formication, by starting, by painful cramps. This sensation is sufficiently analogous with that experienced by every normal person the day following a long walk, violent exercise, or any form of muscular effort when out of training.

The neurasthenic, in addition, feels in his whole body a peculiar sense of heaviness. His limbs appear to him more ponderous than normal, his body seems to have an unusual weight. "When

I am lying down," said one, "I feel so heavy that I think my bed is about to give way under me." [1]

Sensation of aching and sensation of bodily weight—these are the elements of fatigue whilst at rest. Localised in a painful fashion on each side of the vertebral column they constitute the well-known symptom of rachialgia.

2. In static effort, that is to say, when the patient holds himself motionless, sitting, but above all, standing, there is, in addition to the aching and weight, a sense of sinking, of giving way, of subsidence; he has difficulty in holding himself upright; he feels as though his spine were bending and collapsing within itself. In the legs, too, there is the same feeling of bending, of weakness, sometimes of deprivation, an imperative desire to lean, to support himself, to sit down.

In the face, the cheeks appear heavier, dragging downwards; the upper eyelids fall; there is difficulty in opening them completely.

3. In dynamic effort, in movement of the body, in part and as a whole, the sense of weight of the paretic muscles calls for considerable effort to contract them, and this is promptly followed by a feeling of exhaustion, of impossibility of continuance. If the patient persists, discomfort, vertigo, or palpitation may ensue.

[1] Deschamps, *Les Maladies de l'énergie*. Paris, F. Alcan.

A walk, or merely going upstairs, prostrates him; he is incapable of running. Continuous work is impossible. Many women are unable to do their hair at a sitting, finding it beyond them to keep their arms raised during the time necessary for this task. To complete it they are forced repeatedly to interrupt their toilet in order to rest.

This rapid exhaustion betrays itself also in the handwriting of many neurasthenics. Whilst the beginning of the written line may be horizontal or even sloping slightly upwards, the latter part inclines downwards more and more as the words approach the edge of the page.

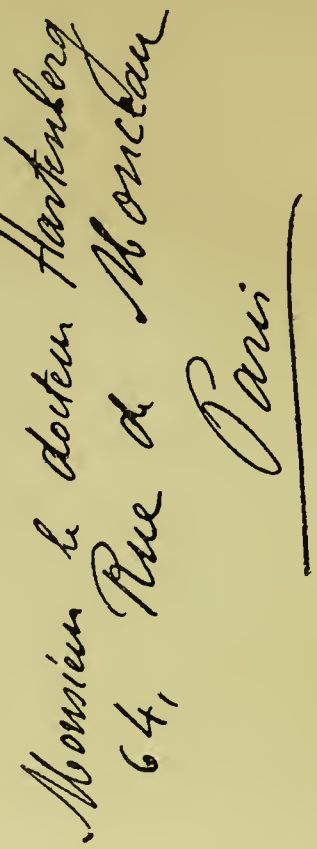
The following facsimiles which I reproduce will, better than any descriptions, illustrate the characteristics of neurasthenic writing.

What is the cause of this sensation of fatigue?

I think it is built up of two elements. On the one hand, it is part of the difficulty in muscular effort which the patient experiences, and on the other hand, it is accounted for by a painful hyperæsthesia in the muscle groups, possibly even in the articulations, tendons, periosteum and bones. We shall see later that the depression is accompanied by hyperæsthesia in different parts of the body. The muscular incapacity is thus only one of the local manifestations of this hyperæsthesia.

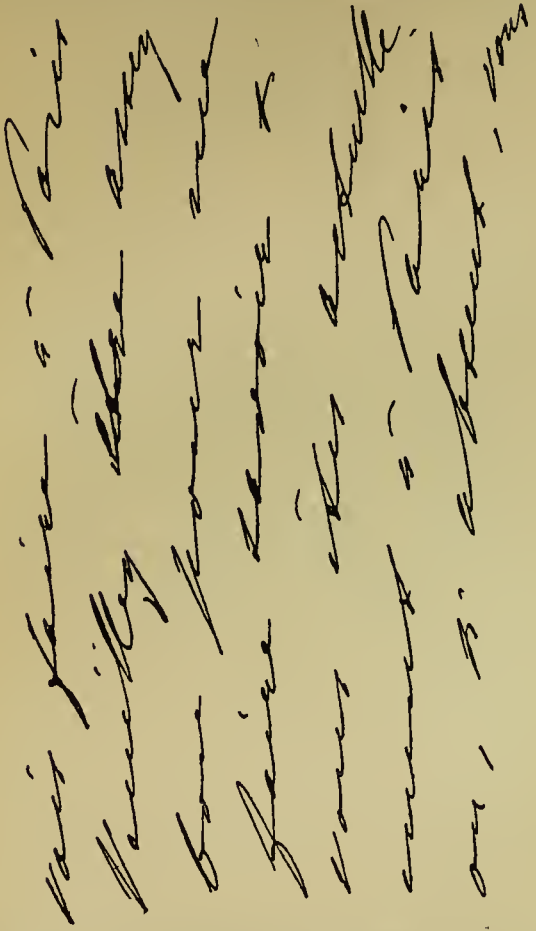
In reality these two phenomena, motor asthenia

and sensation of fatigue, which I have dissociated in my description, constitute a whole which only



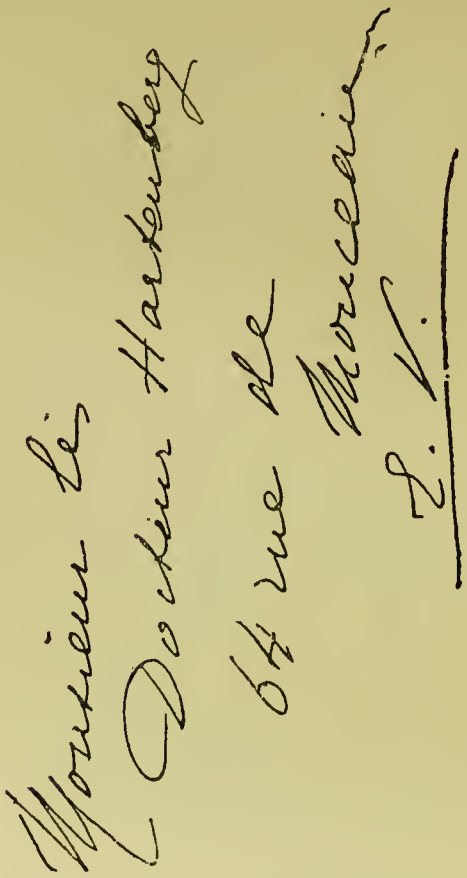
represents two forms of the same nervous trouble, the sensory and motor expressions of a funda-

mental nervous exhaustion. They are the signs



of a state of pathological fatigue which is characteristic of neurasthenia.

The question may be asked, What is the seat of this fatigue? Is it peripheral or central?



A certain number of authors, struck by the appearance of flabbiness, of relaxation of the

muscular system in neurasthenics, have been constrained to attribute their bodily fatigue to the diminution of tone in their muscles, to muscular hypotonus. I myself adopted this interpretation in my previous work upon the *Psychology of Neurasthenics*, but since I have undertaken systematic examinations I have had to admit that this did not accord with the facts. Thanks to the myotonometer of my own invention, I have been enabled to measure the muscular tone of a large number of neurasthenics and to establish the fact that in them fatigue bears no relation to the degree of tonicity of their muscles.

I will shortly describe the principle and mode of use of this apparatus.

Principle of the Apparatus.—This consists in accurately estimating the muscular tonicity by measuring exactly, by aid of a compass, the angle of flexion or extension which a known effort produces upon a joint. It is well known that under normal conditions the amplitude of the majority of joint movements, especially those of the hand and foot, is limited by the tone of the muscles. This may readily be demonstrated by attempting in a patient to extend the hand on the forearm; an elastic resistance may be appreciated due to the tone of the flexors.

If it is desired further to extend the hand, it is necessary to employ a certain degree of force

in order to stretch the muscles which limit the movement and to overcome their resistance to lengthening, with the result of diminishing the angle which the hand forms with the forearm.

Now this resistance to stretching is a direct function of tone, *i.e.* the greater degree of tone the greater the resistance, the weaker the tone the less the resistance. And since, on the other hand, the muscular stretching may be connoted by closure of the angle formed by the hand with the forearm, it may be conceived possible to measure by means of this angle the resistance of the muscles to extension, *i.e.* their tone.

One is justified in concluding that the greater the angle of forced extension, the greater the resistance with which the muscles will have resisted elongation, the greater will be their tone, and conversely, the less the angle of extension, the less will have been the resistance of the muscles, the less their tone. The size of the angle and the degree of tone therefore bear a constant proportion the one to the other. In order to estimate the tone it will suffice to measure the angle obtained, and the degree of tone may conventionally be expressed in terms of angular degree.

These points considered in relation to extension of the hand apply equally to the other articulations.

Description and Mechanism of the Apparatus

The apparatus consists of three chief parts :—

1. A board provided with a strap;

2. An adjustable metal angle the two limbs of which are united by a scale divided into degrees, pierced by a screw having a ring at one end and a wing-nut at the other;

3. A traction dynamometer graduated in kilogrammes.

For convenience in carrying about the apparatus is packed in its case taken to pieces. It is thus necessary to put it together before use. This is done as follows :

The nut is unscrewed, the screw passed through the hole in the plank, the ring being on the side of the strap, and a few turns given to the nut ; the angle is opened and the graduated scale introduced into the corresponding half of the scale in which it slides. The strap is passed inside the angle and introduced into the screw fastening which secures it (Fig. 1). The apparatus is thus ready for use.[1]

Method of Use.—The most convenient estimation to make is that of the tone of the flexors of the hand on the forearm. Except in the case of a localised lesion of the nervous system, by reason of the equality of tone which obtains in the muscles, measurement of this partial tonicity may be extended so as to include the muscular system in general. I would add that it is advisable to take the left arm for choice, since this is less exposed to variations due to work and fatigue.

There is, however, one preliminary test which

[1] This apparatus is manufactured by Mathieu, Paris.

must be carried out, viz. to measure the strength of these muscles.

For in order that the figures may be comparable from one individual to another, it is essential that the traction exercised upon the muscles in order to obtain an elongation should be proportional to their own vigour. It is sufficiently obvious that traction of the same strength applied equally to an athlete or child will produce entirely different results, in-

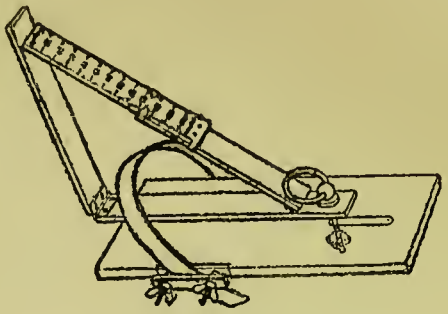


FIG. 1.

dependent of muscular tone. Hence the necessity of a preliminary investigation into the muscular power of the individual and of graduating the traction proportionately to this muscular force.

This may be measured in two ways.

1. By means of the spring dynamometer, which is compressed in the usual manner. This is the simplest and most convenient method, and is preferable if the physician possesses a dynamometer.

2. By means of the myotonometer.

The following is the mode of procedure :

Make the patient sit down beside a little table

placed at his left side, his sleeve being turned up and the bared forearm resting on the table. Place the board in contact with the palmar surface of the hand and fix the arm of the metal angle upon the back of the hand, the shank of the screw passing between the middle and ring fingers. Then by means of the strap brace the metal arm and the hand tightly against the board, the thumb being left out. Tighten the wing-nut so that the metal arm comes well into contact with the middle and ring fingers.

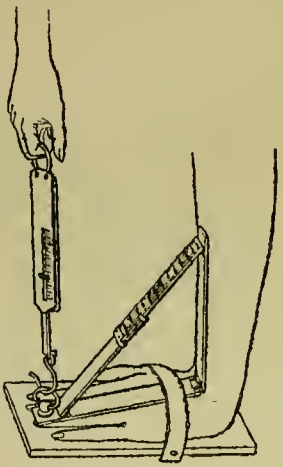


FIG. 2.

Thereupon ask the patient to extend the arm so that the entire hand, held horizontally, with the palmar surface downwards, passes beyond the edge of the table. Making the apex of the metal angle coincide with the fold of the hand extended upon the forearm, slip the hook of the dynamometer into the ring of the apparatus and, holding the dynamometer vertical, make the patient depress his hand with all his force by a movement of flexion at the wrist. It is as well, in order to obviate any movement from the elbow, to keep with the left hand the patient's forearm in contact with the table. Further, as the hand bends in dragging upon the dynamometer, raise the dynamometer so that the hand is constantly kept horizontal, so as to avoid the errors of angular effort.

When the patient has put out his utmost force, read the figure recorded on the dynamometer. This

number is always equal to a fifth of the figure recorded by the pressure dynamometer. One could, therefore, in case of need control these findings the one by the other.

The muscular force being ascertained we pass to estimation of the tone.

The apparatus being in place as before, make the patient rest his arm on the table and ask him completely to relax his muscles, to let his wrist be supple, to look somewhere else in order to distract his attention from the experiment. Slip the hook of the dynamometer into the ring of the apparatus and whilst with the left hand holding one of the arms of the metal angle upon the patient's forearm, carefully adjusting the apex of the angle to the angle of extension of the hand upon the forearm, pull gently and gradually on the dynamometer until the traction exercised is equal to one-tenth of the figure obtained by the pressure dynamometer or half that obtained by the myotonometer, these two figures being identical. (The value of this traction is purely arbitrary. But as it was impossible to exercise traction equal to the strength of the muscles, since this would rapidly become painful, these figures adopted of the tenth part or a half have appeared to be the most convenient and practical.) Now read the marking on the scale; it indicates the angle of forced extension of the hand upon the forearm which produces the conventional figure of the tone (Fig. 2). This figure varies between 85° and 90° in a normal subject. It may be assumed that above 90° commences hypertonus, below 85° hypotonus.[1]

[1] It is likewise possible to measure with this apparatus the tone of the extensors of the hand, of the flexors and ex-

The fairly accurate results obtained with this apparatus have proved to me that hypotonus is in no way related to the sensation of fatigue. Doubtless numbers of tired people manifest hypotonus, but others, no less tired, have a normal tone or one even above the normal. One may conclude that the difficulty of effort on the part of the neurasthenic does not depend upon muscular hypotonus, and so one cannot say that his sensation of fatigue is the consciousness of his hypotonus. The confirmation of this proposition is to be found in examination of convalescent patients. I have carefully examined a number of neurasthenics recovered from their fatigue and have established the fact that in them the tone had not varied, or only within very narrow limits, during and after their illness. Those who manifested hypotonus had it also after their cure.

I have also been led to believe that the hypotonus demonstrated in these patients is a constitutional condition, betraying a debility peculiar to their neuro-muscular systems which, far from being the sequel of a passing depression, might be a predisposing cause of such depression. These hypotonic subjects are weaklings, ready for and predestined to nervous exhaustion.

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tensors of the foot, which it is often useful to know in neurology. For these special measurements I refer to my work, "How to measure Muscular Tone with my Myotonometer," *Revue de médecine*, November 10, 1911.

If hypotonus does not sufficiently account for neurasthenic fatigue, it might be attributed, in contrast with local muscular fatigue, to exhaustion of the motor nerve-terminals in the muscles.

Researches upon muscular work have in fact demonstrated [1] that local muscular fatigue evidenced in diminution of vigour and painful disability is due to exhaustion of the motor and sensory terminals, interfered with by the products of disintegration. Such an explanation, however, only accounts for local fatigue; it in no way explains the general exhaustion which the neurasthenic experiences. In order clearly to understand the difference between these two forms of fatigue it suffices to observe the course of events in the individual after a considerable output of muscular energy, as in a long walk or participation in some form of sport. So long as only local muscular fatigue is experienced the subjects are lively and cheerful, sing, converse, discuss, joke, and display interest and animation. Then suddenly they may successively be seen, one after another, according to their powers of resistance, to become silent, immobile, inert, drowsy, and finally they fall asleep. The explanation is that to purely local fatigue of the musculature has

[1] J. Ioteyko, article in the *Dictionnaire de physiologie*, tome iv. fasc. i. Paris, F. Alcan, 1903.

succeeded a generalised fatigue, of a kind which invades and overwhelms the entire organism.

This general fatigue is undoubtedly a central phenomenon, having its seat in the sensory and motor areas of the brain. It is moreover accompanied by other signs of cerebral exhaustion, depression, boredom, loss of appetite, restlessness, inattention, etc., which have frequently been noted in athletes after strenuous contests.[1] It is legitimate to assume that it is due, in part at least, to impregnation of the brain with products of disintegration, carried to it by the blood-stream.

From these facts it may be inferred that the fatigue of the neurasthenic is a fatigue having a central seat. It is due neither to sensation of muscular hypotonus nor to local affection of the nerve-terminals in the muscles; it is caused by actual exhaustion of the cerebral centres. It is not the automatic function of tone which is diminished, but the active function of muscular motility. Nor is it the actual contractility of the muscle which is in default: for on the ergograph the initial height of the elevations, demonstrating the muscular energy, is normal. It is in the lessened number of elevations that the ergogram is at fault, a characteristic indication of central nervous exhaustion.

[1] Tissié, *La Fatigue et l'entraînement physique.* Paris, F. Alcan, 1908.

We may therefore conclude that neurasthenic fatigue is a central phenomenon, betraying weakening of the psycho-motor centres of the brain.

The neurasthenic is fully aware of this diminution of energy which affects him. It is manifested in him by a repugnance towards effort and, in his behaviour, by economy of effort.

The patient instinctively avoids every occasion which might compel him to move, to change his place, to expend energy. He has a horror of rising from his seat, extending his arms, lifting objects, walking, even of speaking. The only attitude which pleases him is repose in a horizontal position. As Maurice de Fleury has remarked,[1] it was undoubtedly a neurasthenic who was the author of the well-known Arab proverb: "It is better to sit than to stand, to lie down than to sit."

A particular form of this aversion to effort is that which concerns the sexual act. Not only have neurasthenics little sexual proclivity, but some have even a veritable repugnance against it, since they know that this excessive expenditure of force will be accompanied by a painful reaction. They therefore shun such occasions, and if, in spite of themselves, they have succumbed, they

[1] M. de Fleury, *Les Grands Symptômes neurasthéniques*. Paris, F. Alcan, 1901.

are equally irritated against themselves and against the object of their temptation.

From this repugnance towards effort comes, as a direct sequel, economy of effort.

Knowing how every effort is followed by a recrudescence of prostration, the wise neurasthenic attempts to eliminate from his life all superfluous output of energy. Hence arise the nonchalance, the indifference, the apparent indolence which he assumes. He moves as little as possible, stands up, walks, works no more than obliged, makes his arrangements so that he may expend no more than a minimum of that nervous energy in which he is so poor. And thus he succeeds, by means of parsimony, of prudence, of calculation, in meeting, as well as may be, with the meagre resources at his disposal, the demands of his existence and his profession.

Following these signs of motor exhaustion may be enumerated those of irritability, which are their corollary.

In the majority of neurasthenics the reflexes are in general increased. This exaggeration of reflexes, which at times coincides with muscular hypotonus, once more demonstrates that between reflexes and muscular tone there is no direct and necessary relation.

It is, moreover, not uncommon to find in neurasthenics a tendency to spasms, cramps, and

painful contractions. It is a familiar fact that nervous fatigue is one of the conditions which favour the development of tics and occupation neuroses.

Finally, in certain cases there occur attacks of psycho-motor excitement, with enervation, muscular restlessness, agitation, leading to an excessive expenditure of force, which leaves the patients more exhausted than ever.

Intellectual Disabilities.—The intellectual troubles of neurasthenics also consist in a diminution of psychic activity with sensation of fatigue. Like the motor disabilities, this functional deprivation may be divided into three elements: weakening of active capacity, greater rapidity of exhaustion, slowness of restoration.

These signs of intellectual insufficiency affect mostly the attention, the memory, the imagination, and the reasoning power.

Voluntary attention is the function most involved. All patients deplore their incapacity to fix their minds upon any intellectual task: reading, writing, calculation, assimilation, reflection. If they attempt to concentrate with an effort, they rapidly become exhausted, their exhaustion headache makes its appearance or increases; they are obliged to stop.

Memory is equally diminished. The patient reads without remembering what he has read.

When he comes to the bottom of a page he no longer retains what he has read above. He forgets recent conversations, names, dates, even topography of places. One of my patients lost her way in Paris, where she had long lived and which she knew intimately. Another, making a purchase in a shop, was unable to recall her name and address. This leads to endless errors and confusions.

Imagination vivid recalling of memories, and mental images, is involved in like fashion. The mind is equally inapt at clearly recalling the past and at realising fresh combinations. This defect is particularly noticeable and prejudicial in the case of authors in whom the faculty of creation is extinct.[1]

Finally, *judgment* and *reasoning power*, abstraction and generalisation, lose in precision and scope. The patient's insight is less clear into the problems he has to solve, his grasp is less rapid and certain. His arguments are ill-arranged, inco-ordinated; the highest intellectual functions are under a cloud.

In a general way it seems to the patient that his mind is torpid, cloudy, dull, as though enveloped in a mist or veil which deadens perception,

[1] All these psychic affections in neurasthenics have been studied in detail in my former work, Hartenberg, *Psychologie des neurasthéniques*. Paris, F. Alcan.

and this cerebral numbing imbues the whole psychic existence of the sufferers with a characteristic dreaminess and obscurity of thought which have been well described by some of them. They have the sensation of being in a prolonged dream, where everything around them is vague and ill-defined; where they themselves pass in a reverie.

This defect is accompanied by a sensation of *cerebral fatigue*.

The neurasthenic habitually feels his head to be at once heavy and empty; he is conscious of a sensation of constriction, of pressure, of weight, which constitutes the neurasthenic cephalalgia. Sometimes he has the feeling as of a ball occupying his cranial cavity. These various sensations create a species of cerebral paresis which, as some patients put it, resembles muscular weakness.

There have been few experiments undertaken in order to estimate intellectual fatigue in neurasthenics. This is, however, so clearly in evidence as to make its demonstration superfluous. It would nevertheless be interesting to submit such subjects to examination by means of tests similar to those devised for the investigation of normal intellectual fatigue. Doubtless equivalent results would be obtained.

Defects of Sensibility and Sensation

The depression which we have just studied in the motor and intellectual functions of the brain is also manifested in the domain of sensibility. It is indeed less frequent here, or at least less apparent, since a fairly accentuated degree of depression is called for before the patient finds himself incommoded thereby. But in profound nervous exhaustion, in chronic forms, depression of sensibility likewise makes its presence felt and takes its place in the clinical picture of the neurosis.

A distinction must be drawn between external or sensory and internal or kinæsthetic sensibility.

In the domain of *external sensibility* it is evident that in those seriously affected the sensory impressions from the external world lose in clarity of outline, in vividness. The eyes appreciate objects less in relief and with less colour; the world is reflected in the consciousness of the patient as a flat and decolorised fresco. Auditory acuity is diminished. Patients distinguish less clearly sounds, noises, voices. Music-lovers, becoming neurasthenic, have been known to lose all their attraction towards music. Flavours are more confusedly appreciated by the taste; food and drink appear insipid. At times the calls of hunger and thirst disappear. Tactile sensi-

bility is likewise lessened ; contact is defined with less delicacy and precision. In examining the sensibility by means of Weber's compass, the separation of the points is greater than in a normal subject. In all forms of perception there is a retardation. Finally, even genital sensibility is diminished, in men and in women ; the sexual orgasm is associated with less voluptuous sensation, and in some cases brings no pleasurable feeling with it.[1]

This general diminution of external sensibility creates in the patient an entirely peculiar condition : *lessening of the sense of reality*. Our sensation of objective reality arises through external impressions which are constantly stimulating our nerve-terminals. The resulting cerebral images have a stamp of reality which is well defined in direct proportion to the intensity of the impression. If now we suppose these external impressions diminished, deadened, simultaneously the external world will lose its reality, will, as it were, be obliterated in a haze of distance. Hence arises the subjective attenuation of reality, of the sensation of the actual. " I never clearly appreciate the external world," writes a neurasthenic. " It seems as though I had never been in direct and immediate contact with it. Between objects and myself there is always a kind of

[1] G. Dumas, *La Tristesse et la joie*. Paris, F. Alcan.

isolating barrier, an intervening screen, like a covering of cotton which gives me a padded, deadened feeling, such as follows an injection of cocaine." Hence the sensations of remoteness, of unfamiliarity with the appearance of things, of non-recognition, occasionally mentioned by patients.[1]

In the domain of internal or kinæsthetic sensibility is the same *attenuation of perceptions*. The patient appreciates more vaguely the existence and the modifications of his organism. He feels his body and his members as though empty, as though deprived of active life. It seems to him as though he were becoming dematerialised, his fleshly form dissolving and disappearing. This is what has been called the sensation of depersonalisation.

From this diminished corporeal perception is also derived the *sensation of incompleteness*, and likewise the phenomena of *unfamiliarity with self*, of *double personality*, etc.

There is, on the other hand, in some patients a *hypersensibility to pain*, which is an accompaniment of irritability.

Such patients feel more keenly painful impressions coming from without, heat and cold, shocks,

[1] Pierre Janet, *Les Obsessions et la psychasthénie* (Paris, F. Alcan); Hesnard, *Les Troubles de la personnalité dans les états d'asthénie psychique* (Paris, F. Alcan).

traumatism. The same holds true of impressions emanating from the organism; the least functional disorder, digestive trouble, cardiac palpitation, brings with it an abnormal sense of suffering. They complain of painful sensations in the scalp, the back, the limbs, the skin, of tingling, shooting, burning, sometimes so marked that Valleix called neurasthenia generalised neuralgia. It is probable that the headache is due, to a great extent, to this hyperæsthesia. At other times there are isolated paræsthesiæ: dead fingers, numbness, heaviness, etc. It would appear as though all internal sensations, which in healthy individuals pass unperceived, become noticeable in neurasthenics, who thus have a painful consciousness even of the workings of their organisms. This is the origin of their hypochondriacal conceptions.

Affective Disturbances.—In the domain of the affective faculties depression gives rise to a certain number of feelings which also may be looked upon as the expression of a diminution of activity.

First and foremost comes *melancholy.*

The neurasthenic is sad. He is possessed of a depth of melancholy which occasionally, it is true, under the influence of a powerful emotion or of enlivening society, may give way to an apparent gaiety, but which is not long in returning when the patient is once more thrown upon his own

resources, and again reverts to the ordinary trend of his thoughts.

This melancholy is appreciated as a condition of painful prostration, of respiratory restriction, the chest expanding with difficulty, sometimes of constriction of the throat with an inclination to cry. Externally, it betrays itself by well-known signs: a long face, a dry and lack-lustre eye, an expressionless voice, pale complexion, etc.

What is the mechanism of this depression? In common with many authors, I formerly attributed this sensation of sadness to the consciousness of organic discomfort, to insufficiency of nutrition, and inadequacy of the main bodily functions, circulatory, respiratory, secretory, etc. But the more strictly the hypothesis of the peripheral origin of the emotions is investigated, the greater are the gaps which it presents. Thus it appears to me impossible to attribute the sensation of melancholy to vascular hypotension or to a lowered metabolism, for in many neurasthenics there may be found a normal arterial tension, or even a heightened one, or a urinary analysis in no way indicative of altered nutrition. Moreover, the sudden incidence of depression following bad news, and its equally abrupt disappearance without any change in the organism, by no means point to a necessary organic foundation underlying this emotion. I believe also

that in this case, as with the sensation of fatigue, the primary cause of depression is attributable to a central phenomenon. It is the brain, the affective functions of which are depressed, which causes melancholy, independently of any corporeal changes. These bodily changes, too, appear much more the results of the central modification and the resulting sensation of which the patient is conscious than the exciting cause. Doubtless it is possible that in the long run the physical decay may end by accentuating, by, so to speak, consolidating, the melancholic mood by means of a centripetal reaction ; as far as the origin is concerned, however, I repeat that I consider the feeling of melancholy to be attributable to a central depression.

Next to melancholy may be placed the sensation of *boredom.* This seems to be the corollary of the former. In the case of the neurasthenic, the constant sensation of depression, the absence of all joyous emotions, impart a deplorable monotony to the inner life. The interest of existence is kept up by a multiplicity of small stimuli, whose effect is felt at intervals throughout the course of a day, surprise, curiosity, distraction, etc. In the case of the neurasthenic, however, these stimulations are lacking ; the depression which overwhelms him renders him indifferent to the pleasures of the passing hour. Hence the

lack of interest, the incuriosity, which constitute boredom.[1]

Another noticeable manifestation is *pessimism*, a projection upon the external world of the internal melancholy of the patient. For the spirit starved of joy the normal outlook is upon a world badly constructed and a nature which is evil.

Misanthropy, also common in chronic neurasthenics, is only a pessimism which shuns the regard of men. Taking no pleasure in their society, conscious only of their defects, the sole desire of the misanthrope is to avoid them and to isolate himself in a wild savagery.

Finally, all these painful sensations, all the inner sufferings of the neurasthenic frequently lead him to ideas of suicide. Death appears to him a deliverance; he desires it, summons it, dreams of bringing it about. Nevertheless this longing for death always remains platonic. The neurasthenics who commit suicide are very few in number. The fact is that, despite all his actual grievances, the patient yet retains hope at the bottom of his heart.

As signs of affective irritability, we may select the increase of *emotional apprehensiveness* and *bad temper*. The patient becomes restless, apprehensive, timid, susceptible, irritable. Many live in a continual state of apprehension, of anxious

[1] Tardieu, *L'Ennui*. Paris, F. Alcan.

expectancy. Their fears bear at once upon their state of health (fear of some incurable malady of the brain or spinal cord, of insanity, of ataxia), upon their future (fear of losing their situation, of leaving wife and children without means), upon the disappearance, in the case of men, of their sexual power. Upon this foundation of anxiety are sometimes developed acute crises with oppression, palpitations, cold sweat, etc.

Volitional Defects.—The act of volition is a complex operation, made up of three successive stages :

First of all, a stimulus springing from the affective life, necessity, desire, appetite, emotions, which furnishes the initial impulse.

Secondly there follows an intellectual elaboration by means of which the act is prepared, studied, examined as to its advantages, inconveniences and consequences, and then decided upon through a fixed resolve.

Thirdly and lastly, material performance, more or less complete, more or less skilful, consisting of a victory at once over intrinsic difficulties, fatigue, emotions, scruples, timidity, fear, etc., and over extrinsic difficulties, material or social obstacles.

The neurasthenic state has then the effect of interfering simultaneously, by default, with the three stages of the act of volition.

It produces an *insufficiency of impulse* through the apathy, indifference, boredom, lack of interest, pessimism, distaste, which have been described as afflicting such patients.

It produces an *insufficiency of elaboration* and of decision through the diminution of attention, of memory, of imagination, through the effort accompanying thought and from anxiety and irresolution.

It creates *insufficiency of execution* through fatigue, difficulty accompanying verbal, graphic, and muscular effort in general, through the effect also of emotional inhibition, doubts, hesitations, scruples, timidity, phobias, all phenomena of frequent occurrence in neurasthenics.

To sum up, one may say that volition is profoundly involved, and this lack of will-power is one of the most potent sources of moral suffering in neurasthenic patients.

Organic Disturbances. — Finally the organic functions themselves express in their own way the central nervous depression.

Thus in the case of many neurasthenics may be demonstrated *vascular hypotension, retarded respiration, gastro-intestinal atony, atonic constipation, diminished nutrition and secretion, and sexual depression,* betrayed by infrequency or total absence of desire, and in men by incomplete or absent erections.

Vertigo, dizziness, tinnitus aurium, of such frequent occurrence in neurasthenics, are also doubtless referable to the dynamic and circulatory disturbances of the cerebral centres.

On the other hand, increased irritability in some patients creates in the organic domain attacks of *palpitation, gastric* and *intestinal spasm* (spasmodic constipation), *vesical spasm*, the phenomenon of *premature ejaculation.*

It is doubtless to this cause that are attributable the *disorders of sleep*, which are the rule with neurasthenics. Whilst some are always sleepy, torpid, especially after meals, and at night sleep profoundly for ten or twelve hours, others, on the contrary, suffer from insomnia.

Some are unable to get to sleep ; they toss for hours on their beds, and when finally they doze off their slumber is superficial and light, and they have the impression of not wholly losing consciousness.

Others fall asleep readily, but wake in the course of the night, generally at about the same hour, and then pass through a period of insomnia, filled with depressing reflections, anxious preoccupations, black thoughts, only to fall tardily asleep towards morning. Dreams and nightmares are of frequent occurrence.

These are the numerous clinical signs whereby asthenia and irritability of nervous centres are

expressed in terms of functional disturbance of the different systems. It is obvious that all these signs do not in practice acquire equal value; some are essential, primordial; others, on the contrary, merit relegation to a secondary position.

The most important, in my opinion, are the signs of physical and intellectual fatigue. Fatigue is indeed the essential stigma of the neurasthenic state. It supplies the indisputable criterion of nervous depression. It may be said that, if a patient suffers from habitual fatigue neurasthenia exists, if there is no fatigue there is no neurasthenia, whatever other symptoms may be present or absent. It is fatigue which permits of differential diagnosis from other neuroses.

After fatigue comes headache, which is present in the case of nearly all patients, and affective disturbances, consisting especially in depression and anxiety. Then follows lack of will-power, and finally disturbance of sleep.

The other symptoms are rarer and less striking. They have appeared to me, in order of frequency and from my own personal observations, to occur as follows: vertigo, tinnitus aurium, palpitations, sexual frigidity, with or without impotence and premature ejaculation, loss of the sense of reality, depersonalisation, etc.

One word in relation to atonic dyspepsia. The classical authors have all considered this

dyspepsia with dilatation of the stomach to be one of the stigmata of neurasthenia. Undoubtedly the majority of such patients suffer from dyspepsia, and with them dilatation is almost a constant feature. But strict investigation has led me to think that this dyspepsia, far from being the consequence of a neurasthenic condition, antedated it, and should more legitimately be held to be one of its causes. On interrogating patients, one learns that for many years they have complained of stomach trouble and difficulty of digestion, whilst as yet experiencing no symptom of nervous depression. The latter only made its appearance at a later date, when other occasional causes came into play. It would not then, under such conditions, be justifiable to consider dyspepsia as the consequence of nervous exhaustion, as a stigma of neurasthenia.

This depression, with its attendant symptoms, is not, however, maintained at a permanent level ; it varies in intensity under diverse circumstances.

To begin with, the time of day has a great influence upon it, and here there are individual differences which it is important to note.

Some patients are not depressed in the morning. On waking they feel fairly well ; but rapidly,

as the day advances, lassitude assails them, to prostrate them completely by night-time. Even the exertion of dressing begins to depress them, and a couple of hours after rising they feel less active. When, however, they have devoted half a day to their professional or social pursuits they come to the end of their tether.

Others, again, are more tired in the morning than at night. Waking is for them the most painful moment of the day, the head feels heavy, the mouth clammy, the spirit is oppressed with morbid thoughts, will is irresponsive, the muscles sluggish and painful. It is with an effort that they rise and shoulder their daily tasks. Then, little by little, whilst yet remaining tired, their activity becomes somewhat aroused. But it is only towards evening, when the lights are lit, that the mind becomes animated, that the lassitude disappears, that they feel inclined towards conversation and activity.

There is finally a last category of patients to whom the day brings no respite, whose fatigue is kept up in an equal degree from the moment of rising to that of going to bed.

It has seemed to me that from a practical point of view these diurnal oscillations of fatigue might serve to a certain degree as criteria of the nervous exhaustion.

When fatigue makes itself felt only in the

course of the day we have the first degree. It is, in fact, as though the organism no longer possessed its quantum of energy, and the normal daily expenditure exhausts it too soon and too quickly. Nevertheless this exhaustion is not very considerable, since the repose of a good night suffices to restore it.

On the other hand, in the case of the neurasthenic incapacitated from the morning onwards, the night is insufficient wherein to repair the forces expended the day before; fatigue is continual and does not disappear. Doubtless the animation, the activity of the day diminish the sense of fatigue, but energy, despite this apparent euphoria, never finds its normal level again. This is a second degree of neurasthenia.

Finally, in a third stage, the most serious, stimulation and activity are incapable of even diminishing the sense of exhaustion. The nervous resources are so poor that no excitation is able to call forth any further effort.

Meals have also a manifest influence upon neurasthenics. When the functions of the stomach are sufficiently well performed, when digestion is accomplished in the normal period of time, the ingestion of food usually assures the patient a certain duration of well-being. This amelioration lasts until towards the end of digestion, when motor insufficiency makes

its reappearance often in an exaggerated degree.

On the other hand, if dyspepsia is a prominent manifestation, the meal leads to somnolence, to torpidity, to an imperative demand for sleep. It appears as though laborious digestion monopolises to its own advantage the entire amount of nervous energy which the patient has at his disposal, leaving nothing for the efforts of intellectual and social life.

Sexual relations also lead to variations in the sense of fatigue. If sometimes they augment this it not uncommonly happens that they provoke in patients a moment of well-being and a return of energy. The axiom, *post coitum, animal triste,* is not always true. I have seen neurasthenic subjects who, having sacrificed to Venus during the day, felt energetic all evening as though cured. The following day, however, fatigue came into its own again, with interest. The disability is then more profound, more invincible than ever. Many patients, knowing by experience these painful compensations, avoid the sexual act by way of economy of effort as mentioned above, in order to escape these reprisals of a jaded organism.

All physical stimuli, open air, games, hydrotherapy, may temporarily improve the fatigue of neurasthenics. The same holds true of chemi-

cal stimulation, by means of alcohol, tea, coffee, kola, coca, morphia, etc. But it is the rule that these temporary stimulations, which constitute a squandering of energy, are succeeded by a more profound lassitude.

Atmospheric conditions also have an influence of their own.

Stormy weather depresses some, stimulates others. Rain and a cloudy sky depress, the sun enlivens.

Finally, emotions and feelings dissipate or aggravate fatigue according to whether they are pleasant or painful. Good news, agreeable company, anger, can all temporarily dissipate the sensation of lassitude, just as disappointment or grief increase it. The influence of the physician, reassuring words, hope suggested, promise of cure also have their beneficent influence. Unfortunately this stimulation, like all the others, has no lasting results. Once the sound of the encouraging words has died away, physical fatigue reasserts itself. It is for this reason that psycho-therapy alone seems to me entirely incapable of bringing about the cure of an authentic neurasthenic.

I would add that certain patients, by nature irritable and impressionable, are subjected to more or less protracted bouts of excitation which strike to the root of their asthenic nervous

state. They then feel neither depression nor fatigue; they behave like healthy subjects, even to exaggeration. But the access ends by extinction, and they relapse into a more profound lassitude.

This is more or less the average or common type, which Brissand called "*le neurasthénique tout court.*" [1] But besides this average type, there exist a host of variations, of exceptions.

To begin with, there are neurasthenics of lesser and greater degree, from the slight depression which the patient succeeds in overcoming by his own will to profound dejection which renders him incapable of effort, inapt at every kind of work, and which touches the border-line of melancholia.

Then again the sum-total of the symptoms enumerated is far from being present in any one patient. Some suffer from physical exhaustion only, others exclusively from intellectual fatigue. These are incomplete and abortive types.

Further, the existing symptoms do not all develop to the same degree. Now it is depression of various kinds which predominates; now irritability or apprehensive phenomena; now some isolated manifestation, headache, vertigo, palpitation, which occupies the forefront of the

[1] Henry Maige, art. "Neurasthénie," *Pratique médico-chirurgicale.* Paris, 1911.

scene. Since the patient often complains only of the symptom from which he suffers most, passing the others over in silence, errors of diagnosis might thus easily occur if the physician, through interrogation and examination, did not take care to lay bare the foundation of neurasthenia, of which the sign complained of is but an exaggerated manifestation.

Amidst all these individual variations one can most often discover the pre-existent personal factor of the patient. It would appear as though the disorder fixes in the individual case upon the point of least resistance, exaggerated native sensibilities. In an individual by nature sad the neurosis will be above all melancholic ; in the choleric it will be irritable ; in the anxious one of trepidation. The apathetic will be mainly depressed, the excitable, agitated. Briefly, the individual factor plays a primary rôle in the clinical aspect of the neurosis, in accordance with the law which I have formulated : *the condition of nervous depression exaggerates all the abnormal or morbid tendencies of the character.*[1]

From the study of these symptoms in the neurasthenic which we have enumerated, can we now form some idea of the malady affecting him ? Can we get an insight into the nature of neurasthenia ?

[1] Hartenberg, *Psychologie des neurasthéniques*, p. 179.

Clinically, it appears to us as consisting essentially in a diminution of the nervous functions, a lessening of their activity, a state of depression, of asthenia. And in this respect, nothing could be happier than the name by which it has been baptized: the term "neurasthenia" well expresses the nature of the troubles from which the patients suffer. Other descriptions have been proposed; it has in turn been called nervous exhaustion, nervous fatigue, organised fatigue, etc. Fundamentally these diverse denominations are synonymous, they all express the same notion of a diminution of function of the nervous centres.

Neurasthenia then appears essentially as a state of depression, of nervous asthenia, the manifestations of which in the various domains, intellectual, affective, sensory, voluntary, organic, produce clinical symptoms.

It is true that side by side with these signs of asthenia we have equally encountered signs of irritability which appear to offer a quasi-paradoxical contrast with them. On a general basis of depression it is somewhat surprising to see phenomena of excitation appearing, which apparently are rather the expression of an excess of energy than an insufficiency. But such an association of phenomena is contradictory only in appearance: it is in reality in complete conformity with the actual mechanism of life.

It is indeed a law of all living substances, of every organ, that diminution of vitality is accompanied by increase of irritability. This is a law supported by all biological observations in the animal world. It is the same for the human organism. An anæmic and enfeebled brain becomes momentarily more excitable, so much so that epileptic convulsions have been attributed to cerebral anæmia. The muscular system, fatigued, exhausted, manifests reinforced contractures and idio-muscular contractions. The jaded heart hastens its beats, and fundamentally nothing is more logical. An organ or organism with diminution of energy has need of more powerful reactions for its defence. The living tissues supply these for the time being. Thanks to them it triumphs over the exciting cause, or else, completely exhausted, it succumbs after this last effort, this supreme resistance.

This is what happens in respect to the nervous system of the neurasthenic. Weakened it becomes more irritable, and it is in this irritability that some of its means of defence are manifested. Irritability, therefore, is in the end nothing but a natural corollary of depression.

The essence of neurasthenia is thus nervous depression; all the symptoms betray it, are derived from it, even the symptoms of irritability; it is above all the syndrome of depression.

In order to make this nervous depression more clearly understood, I have had recourse to the classical comparison between nervous and electrical phenomena.

All the world knows that for any electrical apparatus—lamp, bell, or motor—to work efficiently it is necessary that the current actuating it should possess an electro-motive force, a sufficient potential. If these properties are lacking the apparatus works defectively, the lamp does not burn properly, the bell is barely heard, the motor yields inadequate power. If then this analogy is applied to nervous activity, we have a picture of the neurasthenic condition. In order that the nervous system should properly perform its functions, it also requires a sufficient potential, without which the diverse operations with which it is burdened are defectively carried out. And these affections of the nervous force, through lack of potential, will produce the symptoms which we have found present in the case of neurasthenics.

This view which connects all the clinical manifestations with one fundamental depression, I hasten to maintain, is no simple offspring of the imagination. Numerous facts derived from practical observation may be adduced in its support. I will indicate but two which shall, as it were, provide a natural demonstration.

In the first place, we see that all fatigue, all temporary depression occurring in the case of a healthy individual, gives rise to a series of phenomena corresponding singularly closely to the neurasthenic symptoms: there is the same difficulty in physical and intellectual effort, the same feeling of depression, the same alteration of will, the same insomnia of fatigue as in the case of the neurasthenic. It might be said that every intense fatigue following upon excessive effort represents a temporary access of neurasthenia or that neurasthenia itself is only "organised fatigue" (Maurice de Fleury).

There is, however, yet another proof of an opposite nature, perhaps more significant. This is the demonstration of the facility and rapidity with which all the signs of neurasthenia disappear every time that the central depression is temporarily ameliorated. Who has not observed the complete metamorphosis which takes place in a neurasthenic under the influence of a stimulus, material or psychic? How many times have I not seen neurasthenic men of the world, coming to dine in town with lack-lustre eye and toneless voice, making an effort to raise a mirthless smile, in whom, an hour later, under the influence of lights, of conversation, of wines, coffee, and liqueurs, asthenia and depression had vanished as though by enchantment? Who has not seen

the instantaneous transfiguration which can be produced by good news or an agreeable emotion in a neurasthenic?

It is then undoubtedly central nervous depression which is the cause of all the signs of neurasthenia. Just as this creates them, so do they disappear with it. Neurasthenia is the disease of chronic nervous depression. This conception has the merit of eliminating all misunderstanding and all equivocation. It serves exactly to delimit the boundaries of the neurosis; its diagnosis becomes easy and rapid. Neurasthenia is everything that is pure and simple depression; what is not nervous depression is not neurasthenia.

There is, however, another advantage, still more appreciable, viz., the plain indication given us of the nature of the treatment necessary.

If all the symptoms are but the expression of profound asthenia, the therapeusis should be essentially directed at getting rid of this asthenia, at combating its exciting causes. There is no need to attack one by one and partially, the diverse disorders, motor, intellectual, sensory, voluntary, affective, of which patients complain. A single efficacious campaign against asthenia itself suffices, and in consequence all the symptoms, without their having been taken into account, disappear spontaneously. This we shall see in the chapter upon therapeutics.

But if neurasthenia is nervous depression, it is this and this only. It must not be saddled with all the numerous neuropathic symptoms which have without reason been ascribed to it. It is, indeed, a tendency of our time to include nearly all nervous troubles under the head of neurasthenia, a tendency against which I have already protested. We shall, it is true, see later that numbers of nervous disorders can, in addition to the symptoms I have just described, be met with in neurasthenics. But we shall also see that, according to their nature and origin, these disorders are not in reality part of the neurasthenic picture, that they are only complications, occasional and contingent.

Consequently, if I had to define neurasthenia, I should call it the state of simple depression of the nervous system.

As to the actual lesion of neurasthenia, it is absolutely unknown to us. Is it exhaustion of the nerve cells, intoxication ?[1] We do not know.

So far neither autopsies nor microscopical examinations, nor urinary analyses have provided us with any criteria shedding light upon the inmost nature of neurasthenia.

A cellular disturbance must doubtless exist. Whatever one may say, *neurasthenia is a physical,*

[1] M. Page, *La Toxémie neurasthénique.*

a material affection of the nervous system. It is not purely imaginary or fictitious. Doubtless in some patients auto-suggestion may exaggerate some of the symptoms, but the fundamental and actual depression, which may be appreciated and measured by means of instruments, exists none the less. If one knows how to look for it, and is willing to do so, it may be found. The whole therapeutic problem consists in finding out the causes and eliminating them.

CHAPTER II

WHY DOES ONE BECOME NEURASTHENIC ?

THE exciting causes through which we every day see individuals become neurasthenic are extremely numerous and varied. They belong to all domains : physical, emotional, intellectual. We shall rapidly enumerate them.

Infectious diseases, acute or chronic, are frequently followed or accompanied by nervous depression.

First and foremost comes *influenza*, the depressive influence of which is familiar to all practitioners. They have frequent opportunities of observing patients who, after an attack of influenza, even of a mild type, remain for weeks or even months in a state of prostration, of nervous weakness, from which it is very difficult to rouse them. Hence the term, nowadays become classic, of post-influenzal neurasthenia. *Typhoid fever* may leave behind it a period, more or less protracted, of depression.

Malaria frequently creates a neurasthenic

state, common in colonials, and sometimes persisting for months after return home.

Tuberculosis also keeps up a state of depression, of apathy, of melancholy, which betrays in the nervous system the physical decay of an organism undermined by a profound infection.

Syphilis, particularly in the secondary stage, is equally accompanied by asthenic symptoms.

The *intoxications* act in the same manner. Alcohol, lead, mercury, tobacco, opium, etc., are factors in the development of neurasthenia.

Amongst **general organic affections** should be mentioned in the first instance arterio-sclerosis, diabetes, and gout.

The pathogenetic rôle of *arterio-sclerosis* is, in certain cases, so evident and so well marked that Régis proposed relegating to a separate class those becoming neurasthenic through arterio-sclerosis.

In *diabetes* nervous depression, physical and mental fatigue, depression of spirits, have long been well known, whether in the established disease or in the initial phase. The neurasthenic state may even be considered one of the symptoms indicative of the affection. This cause may be added to others, making examination of the urine imperative in all neurasthenics.

Gout creates in subjects attacked by it a real predisposition to neurasthenia, through a gradual

and progressive intoxication of the nervous system.

Visceral affections also prove frequent factors in the causation of neurasthenia.

The depression of *chronic nephritis* is recognised in all the classical treatises.

Lesions of the genital organs also frequently keep up a state of nervous weakness. This is recognisable in *prostatitis* and *chronic urethritis* in men, in *uterine affections*, and *diseases of ovaries and appendages* in women. It appears as though these deep-seated inflammations gradually exhaust the nervous system, and lead to a continual drain of nervous energy.

The asthenia of *supra-renal affections* is classical.

But of all the visceral affections which are found underlying the origin of neurasthenia much the most frequent are undoubtedly the disturbances of the *digestive apparatus*. The number of neurasthenics who suffer from digestive troubles is considerable. On examination there may be made out dilatation of the stomach, splashing, and stasis. They complain of loss of appetite, delayed and painful digestion, with distension and oppression in the epigastrium, somnolence, and fulness in the head. The tongue is white, the mouth clammy. Frequently the liver is increased in size, and may be palpable. With regard to the intestine, there may be habitual

constipation or alternations of constipation and diarrhœa. Some patients have muco-membranous enteritis. Finally, examination of the urine reveals urobilin, bile and indican.

It is still a matter of controversy whether gastro-intestinal troubles are the cause or the result of nervous asthenia. For my own part I have already stated what my experience has taught me, that in the great majority of cases dyspepsia or enteritis are the most important causative factors in the neurosis. Interrogation of patients and their friends generally discloses the fact that digestive troubles preceded by several months, possibly even several years, the onset of nervous symptoms. Then some emotion supervenes and neurasthenia is established.

I think, therefore, that these gastro-intestinal disorders are exciting causes in the large majority of established neurasthenias. Undoubtedly a nervous depression can bring about dilatation, ptosis, constipation, but these signs are neither so marked nor so lasting as in habitual dyspeptics. The proof of the pathogenic rôle of dyspepsia is that it suffices to attack and cure it for the nervous symptoms, in a number of cases, to disappear.

Whence do these digestive troubles arise? From a variety of causes. In the case of the stomach from unhygienic feeding, bolting food,

habitual in the nervous, drinking too much with meals. In the case of the intestines habitual constipation, results of badly regulated dietary, sedentary life, insufficient physical activity.

Organic diseases of the nervous system are frequently ushered in by a neurasthenic phase, before symptoms of lesions are manifest. It is so with *general paralysis*, with tabes. If in a man between forty and fifty one sees signs of depression supervene without evident cause, one should always bear in mind meningo-encephalitis. In the same way I have frequently observed *pre-tabetic neurasthenia*. *Dementia praecox* may also be ushered in by asthenia. *Paralysis agitans*, which should undoubtedly be considered as an organic spinal affection, although the lesion has not yet been recognised, is accompanied by symptoms of neurasthenia, fatigue, melancholy, etc.

In a totally different connection we also frequently see neurasthenia accompanying certain **critical periods** in human evolution: puberty, growth, menopause, pre-senility. It appears as though in these periods the organism is subject to a form of crisis which puts the nervous system into a condition of lowered resistance, during which it gives way, unable to fulfil its normal and complete task.

One sometimes sees children who, having so

far shown no signs of fatigue or asthenia, become neurasthenic at the time of *puberty* or *adolescence*. Most frequently these children have grown very quickly, have had a spell of exaggerated growth, following upon which the nervous troubles have appeared. Upon examination one realises that their growth is mostly in height, as though drawn out, with long and narrow chests, limbs too long and slender, and inadequate musculature.

"These are children who, as it is said, have grown too quickly. They are, indeed, long and lean. The face bears the marked traits characteristic of this transition period which has been called '*l'âge ingrat.*' Their pale and washed-out complexion is a reflection of their imperfect nutrition.

"Questioning elicits the fact that they frequently suffer from headache; that when they attempt to work the head feels as if compressed by a helmet; their memory is sluggish, their lessons, their tasks call for great effort on their part. They complain of sleeping badly, and on getting up in the morning they are tired and as though palsied.[1]

"Growth exercises a most potent effect upon the appearance of the first symptoms of neurasthenia. Sometimes heredity betrays itself in early infancy by convulsions in association with

[1] Springer, *Étude sur la croissance*, p. 93. F. Alcan, 1890.

acute illnesses, by an irascible temperament, by night terrors, tics, etc., but, more often, the nervous system slumbers, as it were, throughout the whole of this period, and the first manifestations of neurasthenia show themselves simultaneously with the accession of growth which occurs at the time of puberty. It is at this time that the hereditary taint, which was only suspected, comes into evidence. If we refer to what we have said concerning the physiology of nutrition at the time of puberty, we shall see that, the heredity and state of nutrition of a child being known, one can, one ought to, foresee the nervous phenomena that an occasional, trifling cause—trauma, fear, grief, eruptive fever—will call into being. And in fact this is the period of life when the nervous system is at its most active.

"What are the causes which influence it? Rapid growth evolving itself upon a soil hardly equal to its task has a tendency to localise its effect upon the nervous system. If there is any hereditary taint in existence, it becomes no longer a question of a tendency, but of an urgent call.

"But there is another cause which will elicit a response from the nervous system; this is the hyperactivity of brain and spinal cord. This, indeed, coincides with the time when school children have to put forth an extra effort,

which often results in the breakdown of predisposed nervous systems. Moreover, it is the age at which imagination awakes, where a certain type of reading brings before school children vistas of the hitherto unknown; their imaginations run riot, and it is the nervous system which pays the cost of this cerebral debauch. This is not all; it is at this time that the functions of generation are established, desire awakes, and therewith premature connection and masturbation levy a further tax upon the nervous system.

"How can this system respond to all the calls simultaneously made upon it? If nutrition proceeds normally, the surplus of receipts may re-establish equilibrium; but if the organism is tainted, if nutrition is abnormal, if, for instance, persistent dyspepsia results in nutritive materials being elaborated in a pathological manner, the nutrition of the nervous system is interfered with, and neurasthenia makes its appearance." [1]

It therefore appears legitimate to attribute the neurasthenic condition of adolescents to this too rapid growth. It would appear that in them the nervous system has not been able to keep pace with the rapid development of the skeleton and the viscera, that it finds itself behindhand, inadequate, too weak to provide for the motor and

[1] Springer, *Étude sur la croissance*, p. 91. Paris, F. Alcan, 1890.

trophic functions of an organism disproportionate to it. Thereupon it struggles, exhausts itself, weakens; the signs of weakness make their appearance. To this is generally added a fairly pronounced degree of anæmia.

In girls the nervous symptoms are generally found associated with disturbances of the genital system, suppression or scantiness of the periods, leucorrhœa.

In boys who, being at this time at school, have to strive in examinations and competitions, it is for the most part intellectual disabilities which attract attention, difficulty in work, diminution in power of concentration and memory, apparent indolence, which is often wrongly interpreted.

The *menopause* produces in women a series of psychic disturbances of varied nature, amongst which is included depression of the nervous system. Analogous results sometimes follow oophorectomy; there is ground for attributing this neurasthenia of the change of life to suppression of the internal secretion of the ovaries.

Neurasthenia of the menopause, however, does not only exist in women; it makes its appearance also in men. Certain authors, Bombarda, Mendel, Maurice de Fleury, have attempted to demonstrate that in men as in women there is at about fifty years of age a critical period,

accompanied by nervous troubles, neurasthenia amongst them. Quite recently Rémond (of Metz) and Voivenel have published an important treatise in support of this contention. According to these authors the lessening of the internal secretion of the testis, accompanied by prostatic hyperfunction creating a toxic over-secretion, is capable of provoking a neurasthenic state with fatigue, depression, headache, sense of physical and intellectual incapacity, phobias, and obsessions.[1]

Finally, the *pre-senile period* of life, which is coincident with the onset of the sixties, may be accompanied by a sort of flagging of the cerebral and nervous functions, betraying itself especially by neurasthenic symptoms.

I have noted this in certain individuals, large eaters, heavy drinkers, great workers, sexually ardent, who for long years had used and abused their nervous energies, up to the day when their force failed suddenly, when the irreparable damage to their tissues and organs made itself remorselessly felt. Exhaustion, difficulty in working, weakening of memory and attention are the first symptoms of approaching senile decay.

Physical and intellectual *overwork* has naturally been incriminated as a provoking agent of neuras-

[1] Rémond (de Metz) et Voivenel, "Essai sur le rôle de la ménopause en pathologie mentale," *Encéphale*, février 10, 1911.

thenia, the malady of fatigue. One does indeed see it follow upon great efforts, upon repeated expenditure of energy, either in sport or resulting from excessive intellectual work, as in the case of a financier, an overworked manufacturer, an artist creating some work, a candidate preparing for competition.

A more detailed examination, nevertheless, demonstrates that in reality the question is a little different. Doubtless one may see a period of fatigue succeed upon overstrain, but this fatigue is never of long duration, nor does it bring serious consequences in its train. The patient, unable to work further, rests, and the return to a normal state of energy is spontaneously brought about.

The fact is that behind the apparent excess of work is hidden another cause, much more active, the emotional state accompanying it. For the individual who works does not do so indifferently. His work is accompanied by anxiety, hopes, disappointments, uncertainties, that is to say, is constantly associated with an emotional factor. This factor then, far more than the work itself, is the one which produces neurasthenia. It is easy to convince oneself of this by interrogating the patients themselves. All have undergone strong and repeated emotions before succumbing to the neurosis.

I am, therefore, of opinion that overwork alone, indifferent toil, is incapable of producing neurasthenia. A scientist working peacefully in his laboratory, a labourer who accomplishes his task like a machine, automatically, these do not become neurasthenic. Undoubtedly the excessive expenditure of energy can precipitate the depression, but the underlying factor is the emotional state.

It is therefore **emotions** that, for the most part, are responsible for attacks of neurasthenia, apparently due to overstrain.

These emotions belong to the class which were formerly known as depressive passions : anxieties, fears, disappointments, griefs, inconsolable sorrow. Varying according to the age and social condition of the individual, they act fundamentally in an identical manner. It is emulation, the anxiety to obtain first place, which constitutes scholastic overwork. It is the uncertainty of the result, the stress of competition, which causes the neurasthenia of candidates, a neurasthenia which is usually soon cured if they are successful, under the influence of their comforting sense of satisfaction, which, on the contrary, drags on and is perpetuated if they have met with the rebuff of failure. The emotional shocks of daily life, the anxieties, slights, alternations of hope and disappointment, the excitement, the nervous tension in which they

find themselves without cease, underlie the neurasthenia of financiers, manufacturers, merchants on the grand scale, professional men, inventors, writers, artists. If it be true that neurasthenia is increasing in frequence, it is undoubtedly attributable to the intrinsic difficulties of the struggle for success in our epoch of cut-throat competition. There is perhaps more cerebral overstrain than formerly, but there is, above all, more emotional overstrain.

Just as in the lives of productive workers, so in those of idle worldlings there exists emotional tension. The necessity of making a show, the slights, the vexations, the spite and calumny which flourish in the social world provide those who move in it with the same shocks, the same disappointments as in the case of those who dedicate their brains to more useful tasks. Add to these alimentary intoxications, sexual excess, insomnia, boredom, etc., and we can understand why so many of those without occupation carry a load of neurasthenia from pleasure to pleasure.

Griefs, bereavements, reverses of fortune act in the same manner. How many there are who have become neurasthenic through having lost a relative, a situation, a fortune.

The inner conflicts in the matter of *chastity* have also been incriminated as one of the provok-

ing causes of neurasthenia. Writers have long noted that sexual abstention, in spite of ardent desire, induced in young people, in celibates, in ecclesiastics a state of nervous depression with lassitude, melancholy, disgust with life, and loss of will-power. Quite recently M. Renaudin has dealt specially with this subject, basing himself upon cases observed personally.[1]

" The individual . . . is haunted by the carnal image, his senses are in a continual state of excitement, whilst not only does he refrain from yielding to their impulsion, but he struggles to drive from his brain the voluptuous image which obsesses it. This constant struggle is, for the nervous system, a source of considerable fatigue ; it is not surprising that it should give way, should soon show signs of weakness, of asthenia, of depression, of diminution of its potentiality, expressions which are all synonymous : neurasthenia is an accomplished fact.

" So long as no hereditary taint intervenes to modify the neurosis in any particular manner, ' virginal neurasthenia ' (if I may be permitted this neologism) approximates to the type of depression, chronic agitation of first or second degree (classification according to P. Hartenberg).

[1] G. Renaudin, " Du rôle de la virginité dans l'étiologie de la neurasthénie," *Archives médico-chirurgicales de la Province*, septembre 1911.

" Wakening is painful ; during the twilight hours the imagination of the young man is traversed with sinister ideas ; he regrets not having died in his sleep ; as his ideas assume concrete shape, two sensations take possession of him—he reflects how dull and empty existence is, and he is overwhelmed with fatigue, he would like to take root there, on his bed, would like to become petrified, never stir, await death to free him. Intellect, however, is untouched in the neurasthenic ; whilst voluptuously caressing the image of death, he ' knows ' that it will not come to seek him thus. . . . As a stimulus he addresses mentally, as Don Quixote to Dulcinea, an invocation to his adored, for the chaste young man is chronically and passionately in love, and decides to attend to his affairs. He finds, moreover, physical activity to be the best remedy for his ills, and if his circumstances imposed this upon him imperatively enough, he would be saved. We have, however, seen that, contrary to the above-quoted opinion of P. Bourget, the subject of the present discussion is mostly a citizen of large towns, and is occupied in study.

" The most terrible hours for him are those he has to pass alone, immersed in Roman Law or Human Anatomy. Whatever the charm of these studies, they can never captivate his imagination. If he begins work too soon after

his meal he quickly falls asleep, as he is ordinarily the victim of more or less well-marked gastric or intestinal weakness. At the end of an hour's oppressed sleep, interrupted by nightmares and sudden awakenings, he comes out of his torpor, and, whilst rubbing his eyes, ideas of suicide come into his mind. . . . He takes up his reading again at the spot where he broke off, but finds it impossible to fix his attention; between his eyes and the book are interposed a thousand incongruous pictures, wherein he finds himself mixed up in the most suggestive positions with ideal feminine forms; sometimes the form takes actual shape, and represents the traits of some woman to whom he is platonically devoted, when the romantic young man forces himself with utmost anger to banish the voluptuous image —usually in vain. Frequently, discouraged, exhausted by the struggle, he throws his book aside, and remains stretched upon a couch, watching the hours pass upon the clock, reflecting upon the emptiness of a miserable existence wherein the only joys which make life worth living are denied him. . . .

"After this, let us watch our afflicted patient in society; we should not recognise him; he is now in the midst of a phase of excitement; none of his fellow-students is more boisterous or turbulent than he, and his companions' fair and

frail friends pronounce him a good fellow, and far from strait-laced. This exaltation is yet more exaggerated in the presence of the adored one, and his joy in being in her presence frequently shows itself in a manner somewhat bold for one who does not wish to pass certain limits. . . .

" Waves of depression break in upon the phases of exaltation ; suddenly, following upon some buffoonery, come moods of the blackest pessimism, or the boisterous youth of a moment ago retreats into his shell and no further word can be got out of him.

" The phase of excitation is always succeeded by a period of maximum depression ; the patient of his own accord reviews the moments when he went so far as to forget the sad realities of his existence.

" When the patient by chance rids himself of his amorous obsessions, the trend of his thoughts is not any the gayer on that account ; now they take the form of preoccupations for his health, now for his future ; he calculates with terror the annual income required to bring up a family, is broken-hearted in thinking that he will never attain it, because with his usual bad luck his position will bring him in nothing, and he will be lucky if he finds some poor girl willing to marry him. Scruples of conscience also come to

torment him, the principal subject of which is connected with the Confessional.

" Not only is he incapable of the concentration necessary for his studies except by a great effort, but the least physical strain is painful to him. Moreover, he has the greatest difficulty in making up his mind to do anything ; he has to have a companion who can authoritatively push him, in work as in play ; he constantly vacillates. In this respect Y—— was typical ; occasionally he would announce, on sitting down to dinner, that he would go to the theatre that night ; after the soup he was no longer certain whether he ought to go ; after the joint and before the next course he wished to go to bed, and after dinner he withdrew into himself or let himself be taken out anywhere by a friend.

" To sum up, in the subjects who have served as types for me, the psychic syndrome as described by P. Hartenberg was complete without any single symptom attaining to a considerable degree of severity. There were found : (1) Affective stigmata, fatigue with repugnance towards effort ; depression of spirits and ennui with pessimism and misanthropy ; emotionalism, anxiety, diverse obsessions, etc. (2) Psychic asthenia manifested by diminution of attention and memory. (3) Asthenia of will."

Thus, according to Renaudin, this " virginal

neurasthenia" would have as its underlying factor the warfare between the will and the sexual impulses. We must also remember that Freud has equally considered abortive sexual excitement, without satisfaction, in young people, in engaged couples, in widows, to be one of the causes of his "neurosis of distress." It is perfectly possible that, according to the temperament and the predisposition of the individual, this same cause may engender in one case the syndrome of depression, in another that of anxiety. Nevertheless, it seems in Renaudin's cases to be the effort of resistance which produces the exhaustion by a sort of overtaxation of the will; in Freud's cases, on the contrary, anxiety supervenes in an unconscious manner, through a purely nervous and not psychic mechanism, which Freud considers to be a nervous hypertension which, not being liberated by the normal sexual path, escapes in crises of anxiety or in equivalent somatic crises.

Finally, **traumatism,** whether isolated or often-repeated, is a generator of neurasthenia.

We have learned to recognise those attacks of profound depression which are the sequence of industrial accidents. Railway accidents, earthquakes, eruptions, periodically supply us with examples. Here again it is the emotional shock, far more than the physical lesion, when such exists,

which is responsible for the nervous manifestations.[1]

In all the preceding eventualities it is, therefore, fundamentally the emotional state, much more than overwork, chastity, traumatism, etc., which engenders the depression.

Here, however, I think I ought to clear up a misunderstanding of which much has been made.

Since neurasthenia, according to certain authors, frequently arises from the emotions, that is to say, from moral causes, it is therefore a moral disease, and only moral treatment will cure it.[2]

There is here a singular confusion between cause and effect. That a state of depression has origin in a moral cause, is no reason for concluding that such state is not real, not organic. Do we not daily see emotion producing jaundice, diarrhœa, cold sweat? These are, however, most certainly organic phenomena, and no one would think of referring them to psychic disturbances. We know that violent emotion produces an extended reaction throughout the organism, disturbs circulation, respiration, digestion, the secretions, visceral function.[3]

[1] Hartenberg, "L'État mental des sinistrés de Sicile," *Presse médicale*, 23 janvier 1909.

[2] Dubois, *Les Psychonévroses et leur traitement moral.* Paris. Déjerine et Gauckler, *Les Manifestations fonctionnelles des psychonévroses.*

[3] Hartenberg, *L'Hystérie et les hystériques.* Paris, F. Alcan, 1910.

It must also react equally upon the nervous system. The depressive passions create by their intensity or their duration a permanent depression of the nervous system, to which are added circulatory, digestive, nutritional disorders, which emotion calls forth through other paths. Thereby results an alteration in the activity of the nervous centres, of which asthenia is the external expression.

Thus, although frequently born of emotional causes, neurasthenia is not on that account a purely moral disease. The only conditions under which neurasthenia might be considered as purely moral in nature, would be in cases where it arose exclusively by means of a mechanism of auto-suggestion. This would then no longer be a pure neurasthenia, but a pseudo-neurasthenia, of imaginary nature, or, if it be preferred, hysteria.

But, in addition to all these pathogenic conditions which we have just been studying, there are cases in which we see neurasthenia set in, rapidly or progressively, in a patient without there being any cause, apparent or known, by which its appearance might be explained. Without there being any change in their lives, without physical disorder or moral disturbance, these patients may be seen to fall, more or less rapidly, into a state of depression, with all its accompanying clinical signs.

This state lasts a certain time, of varying length, several weeks or months, and then gets well spontaneously and disappears without apparent cause, as it came. So long as it lasts it remains obdurate to all treatment. After being cured it generally reappears a certain number of times in the life of the patient. In reading this description I realise that certain of my colleagues will say to themselves, "This description is that of an attack of intermittent melancholia." Certainly these attacks of episodic depression are actually included in depressive mania or cyclothymia.[1] But, for my part, I am not at all convinced that this new nosological attribution is legitimate. Already, those authors most in favour of the existence of that vast morbid entity, depressive mania, have been compelled to recognise that there exist mixed, abortive, atypical forms, which more and more deviate from the theoretical scheme of the psychosis. There comes a moment when these forms are only linked to the latter by a very slender bond, and the question arises whether such a diagnosis is in reality still justifiable. This is the position of affairs in relation to these attacks of intermittent neurasthenia.

In the first place, if I may be permitted to give

[1] Deny, "La Cyclothymie," *Semaine médicale*, 8 avril 1908. Pierre Kahn, *La Cyclothymie*.

the name of neurasthenia to these cases, it is in reality because they present all the characteristics of simple depression, whilst the distinctive characteristics of melancholia are lacking. We know indeed that the dominant sensation in melancholia is inherently moral pain, deep and unfounded grief which tortures the patient, so much so that psychiatrists consider melancholia as essentially an affective malady. In so far as the psychomotor functions are concerned, these appear in melancholics to be far more affected by inertia than by insufficiency. There appears to be in them a veritable cerebral paralysis of intelligence, of will, of sthenic emotions. Whilst the neurasthenic has inclination but lacks performance, the melancholic desires nothing; this formula well illustrates the psychological difference between these two forms of abulia.

On the other hand, in the case of the intermittent neurasthenics that I have seen, one does not at all meet with these characteristics of melancholic mentality. They have all the signs of simple neurasthenia, quite similar to those of neurasthenia acquired through the various causes which I have discussed. Under these conditions, I do not see why one should persist, at the cost of perverting the truth, in forcing these patients into the category of melancholia, whilst it is much simpler and more in accordance with facts

to admit an intermittent type of neurasthenia. It may well be that the hidden and mysterious actions of the organism, which in various ways produce inherent neurasthenia, which constitute the neurasthenic predisposition, may exercise their function in an intermittent manner, by virtue of causes we do not know, leading to temporary attacks of depression.

Moreover, these intermittent attacks of psycho-nervous disorders are much more frequent than has been so far supposed. They are by no means limited to the isolated outbreaks of depression or excitement of the periodic psychosis. All the major syndromes may from time to time thus supervene in attacks. In addition to simple depression as we are here studying it, there occur also accessions of enervation, of pure apprehension (without any melancholic element), of choleric irritability, of obsessions, impulses, etc. I have several times noted clear cases of such affections. Is not epilepsy also an intermittent neurosis ?

It must therefore, in my opinion, be admitted that intermittence, the spontaneous appearance and disappearance of psycho-nervous disturbances, is by no means confined to syndromes of maniacal excitement and melancholia. Intermittence would appear to be a form of pathological evolution common to all psycho-neuropathic disturbances. It is only an expression, amongst many

others, of the abnormal constitution of the nervous system, an exaggeration of its normal activity. For intermittence in all the phenomena of life, physical as well as psychic, is the rule. It is only when it assumes unusual proportions that it becomes abnormal. It may thus be understood how the majority of functions may be affected by manifestations of morbid intermittence.

It may be seen from this short summary how numerous and varied are the exciting causes of neurasthenia. But these causes, active and powerful though they are, do they suffice in themselves to produce the neurasthenic state ?

Practical observation forces us to answer categorically — no. Do we not in fact daily see individuals afflicted with influenza, malaria, syphilis, gout, and diabetes, suffering from diseases of the stomach and liver, grow up and grow old, overwork in all manner of ways, survive a thousand emotions, without becoming neurasthenic ?

There must then exist, in addition to these exciting causes, another factor, deeper-lying, more hidden, which allows the exciting cause to become pathogenic. This deeply-rooted, hidden factor cannot be looked for elsewhere than in a special predisposition on the part of the nervous system.

Wherein does this predisposition of the nervous system lie? It consists apparently in a lack of resistance to the pathogenic influence of all these exciting causes, in an innate weakness of the nervous elements, in an insufficient reaction against the depressive factors.

The mechanism of normal fatigue will make this clear to us. Depressibility, fatigability, are physiological properties of the nervous system. Every nervous system is susceptible of depression, of fatigue by certain causes, work, effort, emotions, diseases, etc. Fatigue, which inhibits continuation of effort, is only a means of defence of the individual against harmful overstrain. Any one insusceptible of fatigue would kill himself at his task. Fatigue is therefore one of the means of conservation of the individual and the species.

Only, in the normal individual fatigue is quickly overcome; a night of sleep and repose suffices to make it disappear. The next day, the individual has once more become fresh and disposed for work. Any one under the influence of a loss, a grief, a catastrophe, may remain for some days in a state of depression. But soon the reaction sets in, energy reappears, the organism rebounds through the natural elasticity of its vital functions, and the depression is lifted.

But suppose a nervous system having less resistance, a fatigability greater than normal,

a smaller capacity for reaction, of restoration. On the one hand a slighter effort, a smaller alteration will tire it, and on the other, the restoration will be more gradual, less complete. There will remain a surplus of fatigue which rest will not dispel ; the neurasthenic state will have been induced.

Neurasthenia is therefore only the result of this normal property of the nervous system—fatigability. The neurasthenic state is due to exaggeration of this fatigability.

Whereon does this diminution of resistance on the part of the nervous system depend ? Upon constitutional causes, whether innate or acquired, and upon the nature of which we are far from being agreed. In many patients, in spite of the most minute examination, we discover no indication, whether nutritional or structural, which sheds any light upon why they are predisposed to neurasthenia. Their physical aspect is good, their appearance normal, all their organs carry out their functions satisfactorily—and yet they are depressed.

In other cases, on the other hand, we can demonstrate certain abnormalities which enable us to lay on them the blame of a certain degree of nervous defectiveness.

Thus it is that certain neurasthenics come before us with the classical stigmata of degeneracy.

Just as in such cases one can establish the presence of obvious physical abnormalities, malformations of the cranium, of the face, of the ears, teeth, skeleton, etc., so it is permissible to suppose cerebral abnormalities, invisible but none the less real, and which have as a result irregular or pathological behaviour of the psychic functions. Amongst these abnormalities of the cerebral organ are to be included lack of power of resistance, potential inadequacy, tendency to rapid depression, delayed restoration, in short, all those conditions which we have enumerated as underlying neurasthenia.

Constitutional predisposition to the depressive syndrome is in this respect therefore only one of the numerous aspects of mental degeneracy, the consequence of a defect either hereditary or acquired in the earliest years.

There is also nothing surprising in the neurasthenic state being so frequently associated in patients with other neuropsychic affections. Excessive *emotivity*, anxiety, phobias, obsessions, scruples, impulses, manias with motor phenomena, tics, sexual perversions, lack of moral sense, all these stigmata of degeneration are associated with depression.

Hence arises a singular complexity of symptoms, a wide and full clinical picture which might at first sight mislead and embarrass the observer.

But a little attention, a minute analysis of the psychology of the patient, usually succeed in throwing light upon this confusion, in establishing order in this chaos. It is essential systematically to isolate each affection, to put it in its place, to draw up, as it were, an inventory of the patient's abnormalities. One can then easily recognise the fact that these diverse phenomena are only so many manifestations of the primary deficiency of the nervous system.

In others who do not display evident stigmata of degeneration, we find on the other hand a general debility of the body, poor nutrition, glandular insufficiency, poverty of blood, a diminution of all the functions.

I allude elsewhere to those sickly and weedy adolescents, those pale, anæmic women, with fine hair, delicate tissues, and miserable musculature. In these subjects all the organs seem insufficient, all the functions inadequate. The heart is small, breathing shallow, arterial tension low, muscular tone diminished. Insufficiency of the internal secretion of the various glands is probable. Owing to the important works which have in recent years been devoted to the internal secretory glands, the publications of Léopold Lévi, H. de Rothschild, Laignel, Lavastine, etc., we are familiar with the asthenic state which accompanies thyroid, hypophyseal, suprarenal,

ovarian, testicular insufficiency. In such patients visceroptosis may also frequently be demonstrated. There are grounds for supposing that the recoil from such general organic debility falls upon the nervous system, and, without strictly speaking being of itself affected, it nevertheless suffers from insufficiency. The nervous asthenia is only a reflection of the general debility of the organism.

Other neurasthenics, finally, convey the impression of being well-marked "arthritics," of suffering from aggravated auto-intoxication. These, contrary to precedent, are often obese, with a high colour, a strongly acting heart, arterial hypertension, and vigorous musculature. But in spite of this flourishing appearance one sees them fall, on the least pretext, into a state of neurasthenia. The slightest chance cause, added to their habitual intoxication, reacts upon their nervous functions. Frequently their attacks of neurasthenia alternate with crises of pain, cutaneous eruptions, nephritic colic, often too with attacks of apprehension or irritability of temper, so that one can admit a certain interdependence between these diverse phenomena, clearly demonstrating their common origin.

This lessening of resistance on the part of the nervous system, however, be it primary or secondary, influences individuals to different

extents. Theoretically, one may include every degree from an individual ideally normal, in whom all fatigue is perfectly overcome, to one in whom resistance is practically nil. Thus also we may have every degree of predisposition to neurasthenia.

A perfectly normal individual will never become neurasthenic; no work, no emotion will depress him; he always recuperates his expended energy; he is the prototype of activity, is invincible. We all know examples of such marvellous organisms to whom fatigue is unknown, and we hail them as privileged and happy beings.

There comes then a whole series of different degrees of fatigability, of nervous resistance. In all of us, more or less, the ordinary events of life are well withstood; we are not habitually tired. But when there comes some exceptional circumstance, a cause leading to nervous change, overwork, prolonged digestive disorders, infections, intoxications, keen emotions, the organic crises of puberty, the menopause, etc., then the nervous system no longer resists, it gives way. Fatigue supervenes: this is the neurasthenic state.

Such is the case with all accidental neurasthenics. So long as they do not emerge from their habitual mode of life, so long as no unexpected event shakes them, all goes well, their nervous system is equal to all demands upon it.

But let an illness, an exhaustion, a care assail it, at once it gives way and is depressed. Who does not know such people, pursuing the even tenor of their way, remaining normal so long as the course of their lives remains devoid of incident, but who, the moment an emotion disturbs them, that an additional effort is demanded of them, become the prey of an attack of neurasthenia? It is thus with women with delicate tissues, slender limbs, fine hair, and tender skin, who, so long as they live in the mountains, at the sea, in the country, in a sanatorium, enjoy satisfactory health. As soon, however, as they give themselves up to their domestic cares, to social life, fatigue sets in with its train of depressed spirits, ennui, despondency. Without being normally fatigued, such patients are yet always on the brink of fatigue.

Finally, at the foot of the scale, there exists a category of individuals whose debilitated nervous system is infinitely susceptible to fatigue: it can bear up against no work. It is so inadequate that it appears incapable of making headway even against the expenditure of energy called for in the accomplishment of our essential organic functions, circulation, respiration, digestion, general nutrition, muscular action, etc. They are also always tired, tired through the mere fact of being alive.

This is the case with the advanced constitutional neurasthenics who live, even when doing nothing, in a continual state of depression. With them fatigue, asthenia of intellect and will, sadness, and emotional anxiety are constant, form part of their lives. These are the hereditary neurasthenics of Charcot, the inadequates of Deschamps, those whom I have classed under the heading of hyposthenic temperaments.[1]

Who has not seen such subjects with their fragile nervous systems, devoid of energy or resistance, always tired, incapable of a vigorous and sustained effort? In them are to be found clearly indicated all the signs of the depressed state. They present themselves in a stooping attitude, with restrained and feeble gestures, a flat and colourless voice, pale complexion, compressed lips, melancholic expression. Psychically they are of a sad and gloomy turn of mind. They are pessimistic, hypersensitive, apprehensive, timid, anxious.

Their lives are passed in a state of continual fatigue. In the morning the patient awakes dull, with a bad taste in the mouth, a heavy head, with no desire to work or to live, facing with apprehension the new day which he sees before him. However, with great effort, he gets up, tired

[1] Hartenberg, *Physionomie et caractère*. Felix Alcan, Paris, 1908.

already, and one way or another completes his toilet. Gradually, under the influence of breakfast and movement he cheers up a little, and painfully betakes himself to his duty with a resigned courage.

During the day activity, excitement, noise make him a little forget his miseries. In society he is even capable of showing himself gay, witty, and smiling. But he must not be left alone, for in that case fatigue, melancholy, and anxiety take complete possession of him, a whole procession of black thoughts passes through his brain. Sometimes, at five o'clock, he may take a cup of tea which gives him a momentary fillip.

It is at night when the lights are lit that he feels at his best. Dinner in town, the theatre, supper find him smiling, and no one would suspect under his worldly garb and appearance the profound inner distress afflicting him. Then he goes to bed, to sleep fitfully ; the next day all begins over again.

It is in the case of the chronic neurasthenic, who is quite familiar with his own complaint and knows it to be beyond remedy, that one can recognise, in the highest degree, those corollaries of fatigue that I enumerated above, repugnance towards effort and economy of effort. Instinctively aware of his inadequacy in the battle of life, he avoids considerable social gatherings in order to isolate himself in a contemplative inertia.

He remains a spectator and avoids action. He will preferably choose a peaceful and sedentary career, will become an official, a functionary, a professor. And, incapable of taking exercise out of doors, of living the active life, he concentrates his attention upon his inner existence. He delights in analysis, in the reduplication of his " ego."

It is in him also that we see the affective state of depression develop and intellectualise itself. His pessimism becomes a philosophy, his misanthropy a method, his boredom literature. He notes complacently all the subtleties of his thought, records his dark moods, his sensations of strangeness, of remoteness, of depersonalisation, etc., becomes one of those subtle analysts of whom Amiel, one of the most typical of congenital neurasthenics, has left us an immortal example. I have studied this mental state at length in a preceding work, to which I refer the reader.[1]

Thus the constitutional factor plays a primary rôle in the ætiology of neurasthenia, whether native or acquired. In the latter case its influence is at the first blush less evident. When one discovers in patients important and adequate causes of nervous exhaustion it would appear useless to have recourse to another ætiology. But when one looks at things closely one sees that, even in such cases, the constitutional factor is not negli-

[1] Hartenberg, *Psychologie des neurasthéniques.*

gible. If it has not sufficed to create the neurasthenia, at least it has more or less favoured its precipitation. If it be true that every individual, even the most normal, whose nervous system is subjected to deteriorating influences, may become asthenic, it is no less true that these asthenias never appear very severe or very tenacious, the reaction of the organism towards natural cure being easily triumphant, whilst, on the contrary, when one sees an intense and prolonged neurasthenic crisis, there is already present in the patient a native predisposition.

To conclude, in the examination as in the treatment of patients the idea of this constitutional factor must always be present to the mind. Whether it brings about unaided a chronic neurasthenic condition with inborn defects of character, whether it predisposes in some degree to the acquirement of depression through increasing the abnormalities of the character, its accurate estimation is as important in diagnosis as in prognosis.

It is quite evident that these numerous causes of asthenia do not all act to the same extent, nor with the same frequence

Some are rare and are only exceptionally seen. Such are, for instance, the asthenias of suprarenal and pituitary insufficiency, those of prostatitis, and tobacco-poisoning.

Others which make their appearance, not independently of, but accompanying a disease with well-marked symptoms, are not differentiated from the other morbid manifestations, and do not occupy the foreground of the clinical picture. The patients, although suffering from neurasthenia, are not considered as neurasthenics, on account of the other more serious troubles which eclipse the nervous ones.

Consequently only those cases will in practice appear as neurasthenias in which the actual cause of the nervous fatigue remains hidden, out of sight, frequently misconceived, whilst the nervous symptoms come to the front, attract all the patients' preoccupation, from the inconvenience or pain to which they are subjected. These patients, then, will be labelled neurasthenics.

There are thus a certain number of causes of neurasthenia, the most clearly defined, the most common, which we have to regard in a special manner ; they constitute the most usual types of neurasthenics.

Let us first instance such patients as are neurasthenic exclusively from the fact of their defective constitution, whether this engenders by itself a neurasthenia permanent and without respite, whatever the mode of life of the patient, or whether it only creates a marked predisposition, by which, upon the least effort, even of a normal

kind, fatigue and its associated mental state make their appearance.

These make up the large class of congenital neurasthenics, degenerate subjects, most frequently affected with other psychic disorders attributable to this degeneracy, anxiety, phobias, impulses, obsessions, scruples, loss of will power, timidity, sexual perversions, etc., and who, in despair through their physical and moral sufferings, are also the despair of the physician on account of their resistance to all treatment.

Then follow the neurasthenics through digestive troubles.

Digestive trouble is so frequent in neurasthenics that the first writers upon this neurosis considered it an essential stigma. This, it may be believed, constituted an error of interpretation. If the majority of neurasthenics suffer from dyspepsia, it is because dyspepsia is one of the most frequent causes of neurasthenia. It is, moreover, easy to verify its rôle by means of the patient's history. If we enquire into the past we find that long before complaining of nervous symptoms he suffered from difficulty in digestion.

Nevertheless, most frequently, these digestive disorders do not act alone. Emotional factors are habitually added as exciting causes of the malady. It is emotional overpressure, as has long been remarked, much more than intellectual

or muscular strain, which leads to a decline into depression. One is inclined to question whether pure intellectual or physical fatigue, devoid of any affective element, could produce such an effect. I have already described this emotional overstrain in detail and will not return to it.

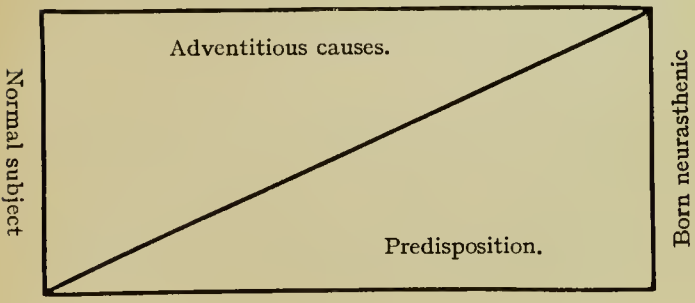
We may thus admit that the immense majority of individuals whom we see become neurasthenic through the existence of a general debility or intoxication, of digestive disturbances, to which are added painful emotions, planted upon a soil predisposed thereto through a defective constitution. But always and everywhere the main factor which we have to take into consideration is predisposition. Predisposition, the degree of resistance of the nervous system, the greater or less vulnerability of the cerebral cell, this is the factor which dominates the entire question of neurasthenia as much from the ætiological standpoint as from that of prognosis and treatment. The more marked the predisposition the sooner, other things being equal, will neurasthenia make its appearance. In those most predisposed it is installed from adolescence onwards; in those who are hardly so at all, it postpones its appearance till the period of pre-senility.

It is predisposition also which governs the severity, the depth and duration of the depression. I have noted that a profound neurasthenia, ac-

companied by psychic complications, only supervenes in predisposed subjects. In others the depression remains superficial, simple, does not last. Most frequently it is spontaneously cured.

Finally, it is predisposition which is, as we shall see, the great obstacle in the treatment of these patients. Although we can exert some therapeutic effect upon these acquired and accidental causes, we can in no way influence the actual constitution of the individual, or the structure of his nervous system. We should have to be able to provide him with a new central nervous system, without blemish. This we are not able to do; we are disarmed. Our rôle is confined to diminishing, suppressing the harmful actions which might exaggerate the morbid tendencies.

One may represent the respective rôles of predisposition and adventitious causes by means of this simple diagram.



One sees that, starting from the left, from the normal person, in whom neurasthenia, if it appears, is entirely produced by adventitious causes, in proportion as one passes to the right one sees the constitutional factor grow, and in proportion the adventitious causes necessary to produce the neurosis diminish, until the born neurasthenic is reached, in which case the hereditary taint brings about the disease unaided. The farther to the left the patient finds his place the less severe and more curable will his complaint be, the more to the right the more serious it becomes, the more rebellious to our therapeutic measures.

Will this analysis of the pathogenic mechanism of neurasthenia enable us to indicate the exact place it should occupy in our nosological classification? Is it an autonomous disease, with features entirely its own? Or is it only a syndrome of accidental, fortuitous occurrence?

It seems to me that it is, according to the case, both of these.

Undoubtedly, when we see the depressive state supervene, from such diverse causes, following such different affections, it is very difficult to conceive it as a distinct morbid entity, and we view it only as a nervous syndrome secondarily complicating a more important pathological con-

dition. But, on the other hand, in the case of constitutional neurasthenics, where it weighs heavily upon the entire mental and physical life and is evolved according to its own proper laws, where it represents the sum of all the disorders from which they suffer, such depression assumes the likeness of an individual, autonomous disease.

In this respect, moreover, the position of neurasthenia is exactly that of the majority of psychic and nervous disturbances with which we are familiar: maniacal excitement, states of morbid anxiety and obsession, epileptic convulsions, various forms of delirium, etc.

Like the former, we see all these, either existing on their own account, and thus giving the impression of an essential malady, like mania, obsession, epilepsy, the systematised forms of delirium, etc., or, on the other hand, provoked by some extrinsic cause, infection, intoxication, emotion, diverse lesions, etc., and then conveying the impression of a simple secondary reaction, an epiphenomenon. And in all cases our difficulty in classifying these troubles is the same.

But at bottom, it must not be forgotten that for all these different affections there is a deep-seated cause, undeniable, although invisible and quasi-mysterious, viz. the actual predisposition of the nervous system to make them realities. This predisposition is itself fundamentally only the

exaggeration of normal phenomena, such as I have demonstrated in the fatigability of the neurasthenic, in the apprehension of the possessed, such as it would be easy to demonstrate for other affections.

Thus nearly all nervous pathology comes definitely into line under the same law. Underlying the origin of the majority of these morbid entities, one always finds the fundamental predisposition ; all the apparent or suspected causes of these only serve in the end to reveal them, to transmute them from tendencies to facts. It would therefore be idle and superfluous to discuss the exact denomination suitable to these disturbances, disease or syndrome. Let us only understand that all are manifestations of a deeply seated predisposition which is revealed by exciting causes, known or unknown.

But on final analysis it is predisposition which is mainly responsible.

It is obvious that under such conditions one may assert that the only and true specific cause of neurasthenia is the nervous predisposition of the patient, the diminution of resistance on the part of his nervous system against all the harmful agents which permit its weakening and the fall into depression. And in this respect one might say, without however generalising too widely upon this proposition, that "it is always the same people who become neurasthenic."

CHAPTER III

THE VARIOUS PSYCHO-NERVOUS AFFECTIONS WHICH ARE TO BE DISTINGUISHED FROM NEURASTHENIA, ALTHOUGH FREQUENTLY OCCURRING IN NEURASTHENICS.

As I said at the beginning of this work, the term neurasthenia has in recent years been so extensively abused that it is daily applied by the laity and even by physicians to a number of psycho-neuropathic conditions which have nothing in common even with the essence of neurasthenia. Such are, in particular, attacks of apprehension, phobias, impulses, obsessions, hypochondriasis, various auto-suggestions, melancholia. All these affections, by their nature, by their mechanism, by their symptoms, by their evolution are clearly differentiated from the depressive syndrome. They exist apart from it; in patients who are in no sense neurasthenic they possess their clinical individuality, their distinct nosological personality. If neurasthenia is a neuropathic type, phobia, obsession, hypochondriasis, morbid auto-suggestion,

melancholia are others. Under no pretext must they be confounded and united artificially in the same category.

But, on the contrary, although essentially different from it, these diverse affections may be associated with the neurasthenic state in the same patient and with it constitute more complex syndromes, mixed conditions. This is a frequent occurrence and explains in a certain measure the mistakes which have been rendered possible. But this association, however close, however frequent it may in certain cases be, does not thereby justify confusion of the component elements. Many are, pathologically, examples of analogous combinations of diverse affections. Nevertheless each one retains its individuality. This is equally true of neurasthenia and other psycho-neuropathic types of disease. We are, then, going to attempt in this chapter to apportion to each its own proper rôle.

Apprehensions, Phobias, Obsessions

The most frequent manifestations which are added to the authentic clinical picture of neurasthenia are undoubtedly those of apprehension, the phobias, the obsessions. We will briefly study these.[1]

[1] Hartenberg, "Les États anxieux," *Compte rendu du Congrès belge de Neurologie*. Bruges, 1911.

In each one of us there exists a form of normal emotivity, that of apprehension. This apprehensive emotivity is our most frequent, our most familiar emotion. It makes its appearance in all the great circumstances of life, is associated with all our solemn moments, from the examination or meeting whereon depends the future of the candidate, through all the unforeseen or thrilling events of our existence, down to the deep grief provoked by the death of one dear to us. One may say that apprehension or distress makes itself felt every time that one's " ego " finds itself in presence of a grave situation, that the question arises of accomplishing some important act, of physical or moral danger, of grief, or even of some visceral shock. Apprehension, too, must be considered as essentially the defensive emotion, as the instinctive reaction of the nervous system which warns or protects in the presence of menace, of injury, of peril.

Three degrees may be distinguished :

1. Uneasiness, vague sense of malaise, discomfort, insecurity.

2. Anxiety, exaggeration of the precedent form, the malaise becoming plainly painful. It frequently takes the form of anxious expectation.

3. Distress, a physical sensation which may have different seats ; in the throat (laryngeal distress), chest (respiratory), heart (præcordial),

stomach (epigastric), abdomen (abdominal). It appears as though the essential element of this emotivity is the sensation of painful anxiety. Physical distress, in addition, is perhaps only the consciousness of various spasmodic visceral disturbances affecting the respiration, heart, stomach, diaphragm, and intestines, which provokes intense anxiety.

This normal distressful emotivity may under certain circumstances be exaggerated, and by this exaggeration may give rise to pathological manifestations, manifestations of anxiety.

Sometimes this amounts to no more than a state of unrest, permanent, chronic, but diffuse, which accompanies the majority of the acts of life, affecting one or another, according to circumstances.

But more often it fixes upon some one element of the intellect or imagination, some sensation, act, thought, producing a more complex ideo-emotive system.

The objects upon which this apprehension fixes are very variable. Now it is an extrinsic sensation, a situation, an act, when the emotion of anxiety makes of this sensation, situation, or act an object of apprehension, of fear. Again it may be in the purely intellectual domain that this apprehension makes itself felt; interfering with the action of judgment, of reasoning, it gives rise

to doubt and uncertainty. It may concentrate its influence upon the domain of morals, of ethics ; uncertainty then bears upon the moral quality of thoughts and acts : this is scrupulousness.

At other times, again, in certain patients the anxiety remains mobile, is by turns concentrated now upon one object, now upon another, and we see them successively torn by a multiplicity of fears, scruples, doubts, and hesitations.

Or, on the contrary, the anxiety may be focused in an elective manner upon a definite object, and thus constitutes a morbid ideo-emotive system, fixed and constant : phobia, " maladie du doute," " maladie du scrupule," etc.[1]

When these various affections become accentuated, grow in intensity, pursue the patient without cessation, return unseasonably, withstand the efforts of the will, which can neither banish nor overcome them, we have to deal with obsession, of which there are as many forms as there are objects of anxiety.[2]

The complete syndrome of apprehension will thus include three elements :

1. A permanent state of anxiousness ;

2. Transitory crises of distress ;

[1] Sollier, *Le Doute.* Paris, F. Alcan.

[2] Pitres et Régis, *Obsessions et impulsions.* Paris, 1906. Arnaud, article "Obsession," in Gilbert-Ballet's *Traité de pathologie mentale.*

3. Phobias, doubts, scruples, obsessions of diverse sorts.

In practice, however, this classification is not adhered to with such theoretical precision, notably in relation to the occasional phobias.

However this may be, one nevertheless sees fairly clearly by this short description what the clinical features are of the syndrome of apprehensiveness.

Let us now study the conditions under which it makes its appearance.

In the first place, there is a category of individuals in whom the aptitude for realising the emotion of anxiety, which, I may repeat, is normal and exists in every one of us, appears naturally exaggerated. With them it is let loose more readily upon the least pretext and appears always upon the point of realisation. Hence arises a nearly constant state of uneasiness in their characters, doubts, hesitations, fears concerning the most ordinary circumstances and acts of life, and in face of exceptional events, a wave of trepidation which quite upsets the individual. These are the subjects whom one may call the constitutionally anxious, the congenitally apprehensive, in analogy with the congenitally neurasthenic. Like the latter, they belong to the family of predisposed neuropaths, whom one also calls degenerates. That is why, in addition to their mental condition

of anxiety, are frequently found other stigmata of degeneration: impulses, affections of the intellect and moral sense, without including the physical malformations which often accompany them. Depression may also co-exist with native trepidation; in which case we have to deal with a mixed type, the constitutionally apprehensive neurasthenic.

As I have already said, this primary uneasiness of patients may remain in a diffused amorphous state, spread evenly over the entire course of their psychic life. But more often, in virtue of certain trends in their characters, it becomes fixed, concentrates for choice upon such and such an object, extrinsic sensations, judgment, ethics, etc.; we then have phobias, disorders of doubt, of scruple, obsessions, etc., these more accentuated ideo-emotive manifestations standing out against the background of characteristic apprehension.

In the second place, in contrast with this inborn apprehension must be placed acquired apprehension. There is a large number of nervous and psychic affections which may give rise to the syndrome of anxiousness. First and foremost comes melancholia, which is frequently accompanied by trepidation, thus constituting apprehensive melancholia. Certain varieties of delirium also take an anxious form. Epilepsy may also give rise to crises of anxiety. Emotional shock

may unaided create an intensely apprehensive state; this is the anxious form of traumatic neurosis.

Griefs, and in particular affairs of the heart, which in some lead to depressive neurasthenia, develop in others apprehensive emotivity; we have evidently to deal here with individual predisposition of character which paves the way for the outbreak of one or other syndrome.

Freud has laid stress upon a state of apprehension produced by insufficient gratification of the sexual instinct, in chaste subjects who do not satisfy their sexual desires, in husbands who practise *coitus interruptus*, in impotents who nevertheless preserve their sexual appetite.[1]

Finally, states of purely physical distress, due to palpitations, to angina pectoris, to digestive disturbances, may engender a continuous anxiety, a complete syndrome of anxiousness, as I have myself demonstrated by numerous examples.[2]

In all these cases the subject presents the characteristics of the apprehensive syndrome: feelings of uneasiness, of permanent anxiety, impending catastrophe, paroxysmal crises of distress, phobias, doubts, scruples, obsessions.

It must, however, here be remarked that the

[1] Hartenberg, "La Névrose d'angoisse," *Revue de médecine*, Nos. 6, 7, 8. 1901.

[2] Hartenberg, "Sur l'origine de certaines phobies," *Revue de médecine*, décembre 1904.

affective element, the emotion of anxiety, is primary, the ideative element, the idea of a phobia, of an obsession, is secondary; the latter is only the intellectual object upon which the anxiety has fixed itself.

It is not the same in the third category of facts which we are now about to study.

Here, on the contrary, it is an idea, a mental picture, particularly affecting, which has given rise to the anxiety which is henceforth closely associated with them. Each time that an event, an association of ideas, evokes the affecting idea in the consciousness, so soon is the attack of distress precipitated. There is in such case an emotive hypermnesia, which brings it about that the intellectual element of the system inevitably brings into play the emotive element, a morbid habit contracted by the brain, a fatal association particularly difficult to break.

The point of distinction between this manifestation of anxiety and the foregoing is, then, that the idea, the object of the distress, is primary and brings the emotion secondarily into being. Moreover, the emotion has no existence except for this idea, it occurs for no other mental image. Finally, during the intervals between attacks the patient is not an anxious subject, and behaves like any normal person. In short, we have to deal with a strictly limited ideo-emotive system, which has

no general bearing upon psychic activity. Indeed, the complete characteristics of the syndrome of apprehension as existing in the foregoing categories are not met with. In them we found a *state of anxiety*, here we have only a *symptom of anxiety*.

All these disturbances with anxiety as an underlying basis have, in origin and in essence, —I cannot insist too strongly on this point— no relation with neurasthenia. They exist and develop apart from this, constitute a type of psycho-neurosis independent of it. There are numbers of patients, very anxious, who show no sign of depression, are in no way neurasthenic. It is, therefore, a mistake, and contrary to the evidence of clinical facts, to attach the label neurasthenic to these subjects. Under no pretext should the syndrome "apprehensive" be confounded with the syndrome "asthenic."

In the same way a pure neurasthenia, simple nervous depression engendered by an intoxication, an infection, overstrain in a patient previously normal, should not be confounded with an anxious neurosis. Doubtless there exists in the neurasthenic a certain degree of uneasiness, an uneasiness, moreover, which is perfectly legitimate, inspired by his condition of ill-health, the diminution in his energy, his difficulty in working, his forebodings concerning the future. This un-

easiness, however, is easily allayed by the words of the physician; his favourable prognosis, his promises of cure, and the first signs of amelioration under the influence of treatment dissipate it altogether.

A constitutional neurasthenic, simply deficient in energy, suffering neither from uneasiness nor from phobias, must also not be confounded with a subject of anxiety.

In short, the depressed and the anxious are two different patients; let us therefore not call our anxious neuropaths neurasthenics.

There are cases, however, fairly common, where we see symptoms of anxiety co-existing with the neurasthenic state. The question then is, not of a single syndrome, but of an association of two syndromes constituting a mixed condition.

This association may be produced under three sets of circumstances.

Sometimes the case is that of a well-defined constitutional neuropath, who is at once depressed and anxious, tired and a doubter. The two syndromes existing side by side are only the double expression of the inborn cerebral taint.

Sometimes it happens that with the congenitally anxious, predisposed in a slight degree to the emotion of trepidation, but who had so far paid no attention to this tendency of their character, a chance access of neurasthenia may occur,

developing and exaggerating this uneasiness, actually constituting the complete syndrome of apprehension, with constant uneasiness, anxious expectation, crises of distress, phobias, and obsessions. Here the nervous depression has acted as revealer of the latent anxiousness. We shall deal elsewhere again with this special influence of depression which I have formulated into the following law: "The state of nervous depression exaggerates all the morbid or abnormal tendencies of the character."

It happens, finally, that the accidentally anxious, in whom a succession of painful emotions, trauma, sexual irregularities, crises of physical distress, have engendered a state of chronic anxiousness, overwhelmed, exhausted, in the long run by their emotivity which torments them without ceasing, end by falling into a state of depression, into neurasthenia. This is a state of secondary neurasthenia developed by painful emotions, the pathogenesis of which I have discussed above. The primary rôle of the emotive state must be distinguished, and such a patient should be labelled as a sufferer from intermittent apprehensiveness become neurasthenic.

Briefly, the rôle of the physician in all such cases is by analysis to dissociate the symptoms of depression from the symptoms of anxiousness. If depression alone exists, the patient will be a

pure neurasthenic. If anxiousness alone exists, of whatever origin, without symptoms of depression, it will have nothing in common with neurasthenia. Finally, if both varieties of symptoms co-exist, their affiliation must be discovered, it must be recognised which is derived from which and, following that pathogenic analysis, the primary rôle be attributed to those which merit it.

We shall see that all these diagnostic considerations have a capital importance in treatment.

Hypochondriasis.—If one has a tendency towards affixing the label neurasthenia upon all patients who suffer and complain without the object of their sufferings being apparent, it is easy to understand that it may frequently be affixed to those who are the subjects of hypochondriasis.

What is hypochondriasis ? It has been defined as " all prepossessions, exaggerated or without foundation, concerning physical health." [1] Thus understood, it does not constitute a disease but a particular form of psychic affection, which may arise from very different causes and under very variable conditions. One can, in fact, distinguish two types of hypochondriacs, the one with a phobia and the insane hypochondriac.[2]

[1] Pierre Roy, " De l'hypocondrie," *Congrès des aliénistes et neurologistes*. Rennes, 1905.

[2] Gilbert-Ballet, *L'Hygiène du neurasthénique*, p. 138. Paris.

The former is tortured by a continual distress upon the subject of his corporeal functions. He fears being attacked by some serious affection, deep-seated and incurable. Watching unceasingly over his various organs, he thinks to recognise unusual sensations, to discover irregularities, abnormalities. He goes from doctor to doctor, always seeking an exact diagnosis for an affection which is not understood and a mode of treatment which will rid him of it. This constitutes an obsession of anxiety, absolutely comparable in form with other varieties of obsession. It is only characterised by the special object of the apprehension, the physical health. These subjects, however, are by no means neurasthenics, exhausted and worn out; they are doubters, anxious, emotive neuropaths, such as we have studied above.

The insane hypochondriac is still further removed from the depressive neurosis. Here there is more than merely a fear concerning health, there is a fixed, absurd, unreasoning idea. Such are patients convinced that they have an animal inside their body, that their intestines are blocked by a foreign body, that they have no stomach, heart, etc. We have to deal with a partial mania which reveals the disturbance of judgment.

Thus neither variety is to be confused with neurasthenia.

Nevertheless in the case of neurasthenics there often arise apprehensions on the subject of their health, the function of their organs, apprehensions inspired by the kinæsthetic impressions which they sometimes experience, reinforced by their state of uneasiness. These are hypochondriacal prepossessions, added to depression, which are to be considered as complications of neurasthenia in the same way as all the other phobias which may arise in the neurasthenic brain.

Here, however, the hypochondriacal symptom is clearly secondary, accessory; the patient is first and foremost a neurasthenic. The leading depressive symptoms are there to indicate the diagnosis; they are the ones to be first sought in order to appreciate the hypochondriacal influence at its true value.

Auto-Suggestive and Imaginary Symptoms

Let us consider yet another category of affections which must not be confused with neurasthenic symptoms, although frequently associated with them; these are symptoms by auto-suggestion.

I have already declared elsewhere and repeatedly that, contrary to the opinion of certain authors, neurasthenia cannot, and has no title to be considered as a disease by auto-suggestion. Its fatigue, its depression, its incapacity for effort, betray a real diminution of activity of the nervous

centres in which the imagination of the patient plays no part, and the existence of the phenomena of depression should remove any doubt upon this score.[1]

But on this real affection may be grafted imaginary symptoms in a secondary manner. There is nothing more natural, more logical, more comprehensible, than this complication. Do we not daily see, in all organic diseases, whatever they may be, that auto-suggestion augments and amplifies certain affections and even brings about others independently ?

Why should not the imagination of neurasthenics, acutely preoccupied by the abnormal and disagreeable impressions which they experience, engender, as in other patients, various auto-suggestions ? When one symptom in particular pursues them, their tendency would be to amplify it ; one exaggerates his headache, another his vertigo, a third his dyspepsia. Fear of an organic disease may give them the illusion of symptoms with which they are familiar. One, who dreads tabes, imagines that he feels lightning pains. Another, terrified by his nervous palpitations, declares himself seized by angina pectoris. Many fearing to lose their wits say that they feel a wave of madness passing through their brains.

[1] Maurice de Fleury, *Les Grands Symptômes neurasthéniques*. Paris, F. Alcan, 1901.

Finally, many patients, women especially, exaggerate even the asthenia from which they suffer, overdo the manifestations of their lassitude, refuse to make any effort, however slight, and frequently immobilise themselves in an invalid chair in a state of powerlessness the greater part of which is imaginary. It often happens, too, that the genuine, true depression being cured, the patient continues to experience it, to give it external expression, by a morbid habit, having no more of the genuine disease than a phantom which survives and simulates it.

In all such cases it is important to distinguish between what is organic and what is imaginary. Luckily, so far as differential diagnosis goes, the imitation on the part of the patients of the symptoms they dread is as inexact as it is inconstant. It suffices to ask them to describe their so-called lightning pains, their attacks of angina pectoris, their feeling of going mad, to realise that these impressions in no way resemble the true affections. The imaginary exhaustion also is not without respite. When they forget that they ought to be tired these falsely exhausted patients show singular accessions of activity and energy. Then suddenly they remember that they are worn out and resume their attitudes of being overcome and suffering. A little diplomacy, ingenuity, perhaps even strategy, on the

part of the physician will succeed in putting an end to all this fantastic symptomatology.

When, therefore, one finds oneself face to face with affections of this kind it is essential to decide whether these symptoms have developed upon a neurasthenic condition or whether, on the contrary, they exist to the exclusion of any nervous depression. In the former case, we should admit that we had to deal with a neurasthenic with auto-suggestive complications; in the second case, we should entirely eliminate the epithet neurasthenic and we should call such patient an hysteric, a mytho-maniac,[1] a "pithiatic,"[2] an imaginative neuropath,[3] according to the doctrine to which one gives adherence.

Melancholia.—One of the most frequent confusions is that of neurasthenia with melancholia. Do we not daily read in the newspapers that so-and-so has committed suicide in an access of neurasthenia? Now such access of so-called neurasthenia is nothing else than a *raptus melancholicus*, for neurasthenics hardly ever commit suicide, whilst melancholics nearly always wish to do so. In the same way, in a family, some member disappears suddenly and it is explained that he has gone into a home to be treated for his

[1] Dupré, *La Mythomanie.* 1905.

[2] Babinski, *Ma conception de l'hystérie.* 1906.

[3] Hartenberg, *L'Hystérie et les hystériques.* Paris, F. Alcan, 1910.

neurasthenia. This so-called neurasthenia, again, is nothing but a melancholic attack. This term neurasthenia, which nowadays may be confessed to, which is respectable, fashionable, and of which one need not be ashamed, frequently serves to cover, on purpose or by mistake, true melancholia.

What, then, is melancholia ? Melancholia is a psychosis the essential element of which appears to be an affective disorder, profound moral suffering, intense grief, upon which the mind of the patient is concentrated. This inner suffering induces at times extreme depression in which the patient is permanently plunged, or at times, on the contrary, agitated apprehensiveness in which he utters complaints and lamentations. Mania may often appear : ideas of culpability, of damnation, of negation, etc. Frequently also, to escape their pain, melancholics yield to the temptations of suicide.

The characteristic of melancholia, then, is the fundamental affective disturbance, moral pain, which constitutes the actual essence of the disease, the centre of the clinical picture. All the other manifestations are contingent and variable, since the melancholic may by turns be depressed or excited, taciturn or noisy, immobile or agitated, stuporose or delirious, etc. Moral pain, however, constitutes and characterises melancholia.

Thus clearly differentiated the melancholic

type need never be confounded with the neurasthenic. Let us see their differences.[1]

The melancholic is a patient who suffers above all from profound grief, from intense moral pain. It is from this primary disorder that are derived the other symptoms, depression, inactivity, loss of will-power, unsociableness, misanthropy, etc. It is because he is crushed by his pain that the sufferer does nothing, wants nothing, has a horror of mingling with the world, of mixing with his kind. One can easily make a mental picture of his state by remembering the pain which we all have suffered through the loss of some one dear to us. Under such circumstances one suffers, one wants nothing, life has no further attraction, one avoids contact with one's fellows: one only asks to be left alone in company with one's pain.

This melancholic state is in fact very different from that of incapacity for effort, of neurasthenic fatigue. There is, indeed, in the neurasthenic a certain degree of sadness and uneasiness, but these feelings are never so pronounced in his case; moreover, they are secondary to the actual diminution of his activity, whereas, on the contrary, in the melancholic the grief, the distress, are primary, are the causes of his inertia.

[1] In regard to this differential diagnosis the excellent exposition of M. Gilbert-Ballet may be read with advantage, published by M. Revault d'Allonnes, in the *Journal de Psychologie*, p. 25. January-February 1910.

But the distinctions are still more clear from the point of view of the will. The neurasthenic wishes to make the effort to work, to act, but he cannot, being quickly brought to a stop by his inadequacy of effort, by exhaustion, by fatigue. He wishes to, but cannot. The melancholic, on the other hand, has no wishes. It would appear as though his affective life, the source of all our voluntary activity, is entirely inert, paralysed. He remains indifferent towards everything. He does not work or act, because he has no desire to do so. His abulia is abulia, not through insufficiency, but through inertia.

On the other hand, the depression of the neurasthenic is far from being immovable, invincible. He is capable of gaiety, of smiling. Under the influence of some stimulus, physical, such as open air, alcohol, or moral, such as good news, or a powerful emotion, his nervous potentiality increases momentarily and he recovers his good humour and activity. In a society agreeable to him the neurasthenic cuts a good figure and puts himself in tune with the prevailing animation. It is only when he is once more alone, face to face with himself, that the depression again asserts itself.

With the melancholic it is different. With him the gloom is fixed, constant, intractable ; he no longer knows how to be lively, how to smile. His

painful indifference resists all stimuli, physical or moral. All is alike to him, but the pain upon which he concentrates his thoughts remains invariable.

Other differentiating signs have been proposed, but they appear to me less distinctive than the foregoing. It has been said that melancholia is an attack, neurasthenia a state, which implies that the former appears and disappears in an intermittent fashion whilst the latter is chronically prolonged. But these conditions are far from being invariable. Neurasthenia may perfectly well supervene in an attack and melancholia be prolonged throughout months and years.

It has also been advised that the method of evolution be taken into account, when it will be found that neurasthenia is developed as a rule progressively, following upon physical and moral causes sufficient to justify its apparition and then disappears progressively, also following treatment, proportionately to the restoration of nervous energy; melancholia, on the contrary, makes its appearance suddenly, without adequate cause, and disappears equally abruptly, independently of all curative measures. There are, however, cases of intermittent neurasthenia, as I have pointed out, which affect the patient in attacks, exactly like melancholia itself. I am well aware that the majority of authors at the present time

are inclined to class these intermittent neurasthenias amongst the periodic psychoses, and that thus they consider themselves justified in considering as melancholia any depression making its appearance in sudden attacks. But it appears to me that this generalisation is carried too far. In order to explain the typical examples, I think one must continue to admit along with intermittent melancholia the reality of attacks of neurasthenia, the latter presenting all the characteristics of nervous exhaustion; it seems to me illegitimate to force them, from an excessive zeal for unification, within the bounds of a complaint the characteristic symptoms of which they do not possess. These cases of intermittent neurasthenia are, it is true, rare. I recognise the fact that most commonly depression coming on in attacks is a melancholic depression. But it cannot be said in a dogmatic manner that intermittence is a certain criterion of melancholia.

There is another characteristic which I have often observed, and which may serve as a differential diagnostic sign: that is the manner in which these patients present themselves before the physician.

Generally speaking, the neurasthenic comes of his own accord, by himself, and asks the physician to give him back his energy, his power of work, to rid him of his fatigue, of his

gloomy thoughts, of his anxieties for his future mental health.

On the other hand, it is rarely that the melancholic takes the initiative in a medical consultation. Most frequently he is accompanied by his family, his wife, his children, who bring him to be submitted to examination at the hands of the physician in order to ask the latter the causes of and the remedy for the change of character which has shown itself in their relative.

This difference is easy to understand when one takes into consideration the mental state of these two morbid types. The neurasthenic, anxious to be well, seeks a cure of his own accord; he consults the physician. The melancholic, indifferent, inert, having no desires, lacks the initiative necessary for such a step; it is his family, alarmed, which takes it in his place.

By the help of these different characteristics it will usually be possible to make a differential diagnosis between neurasthenia and melancholia. It is, however, I may repeat, an analysis of the mental state which will provide the most convincing test. Herein a problem of practical psychology awaits solution, a delicate one it is true, but one from which any specialist worthy of the name will be able to derive credit.

Nevertheless, there are cases in which this differentiation becomes almost impossible. This

occurs when a melancholic element is superadded upon a condition of neurasthenia. In the ordinary neurasthenics, those that form the habitual contingent of our patients, depression and grief are never sufficiently well marked to interfere in a practical manner with the workings of mind and will. As I have said, under the influence of a stimulus, physical or moral, they emerge momentarily from their depression and are capable of placing themselves in unison with normal society. There are a few, however, in whom moral pain assumes more considerable proportions, whereupon the characteristics of melancholia come to be associated with neurasthenic symptoms. Not only is the patient actually and potentially tired, suffering from difficulty in mental and muscular effort, but in addition he is at bottom filled with an indifference, a disgust, an apathy which he makes no effort to overcome. These mixed cases are possibly much more common than one thinks them. There are in daily life many undeveloped melancholic states, possibly many unrecognised melancholics. Many gloomy, pessimistic, misanthropic individuals are doubtless only potential melancholics: an attack of fatigue, of depression, of neurasthenia accentuates their melancholia, and therewith the mixed condition is brought about.

If I have insisted at some length upon this

diagnostic differentiation between neurasthenia and melancholia, it is because it leads to practical consequences of considerable importance.

Whilst in the case of a simple neurasthenic, in whom we have discovered the pathological causes, we may look for a satisfactory cure through judicious treatment, it is, unfortunately, far from being the same in melancholia. We are only too familiar with the resistance of the latter to all therapeutics. In the case of the melancholic nothing succeeds; neither rest, forced feeding, anti-toxic measures, nor tonic medications have any effect. The complaint remains absolutely stubborn. The impression is produced that in these patients there is at bottom a veritable paralysis of all sthenic emotivity, kept up by some inner cause, a total absence of reaction of the nerve centres to all influences. Our rôle is limited to awaiting philosophically the termination of the attack and the cure which therewith occurs spontaneously.

This cure, however, as we must warn the family, is only temporary. Fresh attacks are to be anticipated in the future. It is, indeed, rare for a melancholic not to be the victim of a certain number in the course of his life.

There is another practical consequence of differential diagnosis of still greater importance, viz. the taking of precautions against the suicidal

ideas of melancholics. The neurasthenic, despite his disheartened ruminations, his inclination towards death, never commits suicide. The fact is that at heart he wishes to live, and the hope of better days sustains his patience. Moreover, irresolute, without will-power, he would be incapable of taking the grave decision to put an end to his existence. The melancholic, on the other hand, frequently commits suicide. His affective indifference detaches him from life ; his moral pain makes it unendurable to him. Without will for things which cause him no emotion, *i.e.* all the habitual pleasures of mankind, he acquires by way of compensation a singular energy when it is a matter of carrying out the only desire he has—to die. One has seen melancholics several times repeat abortive attempts at suicide with a savage perseverance. Evading the watchfulness of their surroundings, a moment suffices for them to put their impulse into execution.

And this, once the diagnosis of melancholia is established, is what one must warn the family of. One cannot take too many precautions in this direction, and thus seclusion should always be recommended when the existence of melancholia is beyond doubt.

Thus the neurasthenic must be distinguished in practice from the melancholic, the hypo-

chondriac, the victim of obsession, of auto-suggestion. These diverse affections have no necessary relation to nervous depression and may exist entirely apart from them. They are different psycho-neuropathies which in no case should be confounded with neurasthenia.

There are circumstances, however, common enough indeed, under which these affections develop in an already neurasthenic subject. There is then a simple morbid association such as frequently occurs in the domain of psycho-neuroses. Sometimes in subjects of constitutional taints all the morbid manifestations have origin in a common hereditary source. Sometimes the neurasthenic state acts as an exciting cause to convert a tendency of character from the potential to the actual. In such cases the affections super-imposed upon the neurasthenia deserve, as I have shown above, to be considered as complications not really belonging to it. In reality neurasthenia should be considered only "as a state of simple depression of the nervous system."

CHAPTER IV

THE MANNER IN WHICH EVERY NEURASTHENIC SHOULD BE STUDIED AND EXAMINED

EVERY neurasthenic who declares himself or whom we suspect to be attacked by neurasthenia, offers a triple diagnostic problem for solution. Concerning it we have to ask and assure ourselves :

1. Whether he really is neurasthenic, *i.e.* if he is subject to veritable nervous depression, or if we are dealing with a neuropath believing himself or not believing himself depressed, and the subject of symptoms not dependent upon neurasthenia.

2. What are the causes of his neurasthenia ?

3. To what type of neurasthenia does he conform ?

To these questions the study and examination of the patient should furnish the answer.

This is my procedure in practice :

The patient is introduced into my consulting-room, and I ask him to take a seat on an arm-chair close to my desk. I have already been

observing how he approaches and takes his seat. Some walk timidly, with short steps, stooping somewhat, sit down with caution, and wait. I have already cause to suspect him to be tired, uneasy, timid. Others come in more deliberately, with greater assurance, sit quickly down, and plunge at once into conversation with an air of haste. I suspect already an agitated, irritated, impulsive patient.

I then ask him, "You wish to consult me? Please tell for what complaint." And I let him speak.

Whilst he is speaking I study him minutely, systematically.

From his attire and bearing I try to divine his social status, his place in life. In his face, placed in a strong light, I try to read his approximate age, I judge of his nutrition from the pallor or colour of his tissues, the firmness or softness of his cheeks. Fatigue betrays itself by the downcast looks, heavy lids, eyes ringed and dull; uneasiness by the vertical furrows starting from the root of the nose and horizontal ones in the centre of the forehead, constituting the expression of anxiety. I note whether the voice is flat and toneless, or whether, on the contrary, it is sonorous, full, and vibrant.[1]

[1] Hartenberg, *Physionomie et caractère.* F. Alcan. *Les Timides et la Timidité*—id.

Meanwhile the patient goes on talking. He tells me his symptoms, his history, generally without any order and without discernment of what is essential and what secondary. Sometimes hesitating, no longer remembering what he wanted to say, he pulls a slip of paper from his pocket, and says: "I have made a few notes, may I read them to you?" This is the neurasthenic who makes notes!

One word on this subject. The slip of paper has been looked on as a characteristic sign, almost a stigma of the neurasthenic. This is not quite the case. All neurasthenics do not produce their slips of paper. The pure and simple neurasthenic, the depressed, has not got them. The apprehensive neurasthenic alone allows himself the luxury. The slip of paper is not the product of the depression, but of the uneasiness. It is, moreover, a complex anxiety, the patient at once fearing that he may forget something, and also that the physician may not quite understand what is the matter with him. Therefore paper slips signify not neurasthenia but, more exactly, uneasiness.

By this time my patient has finished his recital and stops. From this account I retain a few essential facts, but more often quite insufficient to guide my opinion, for this spontaneous confession of the patient, in spite of the notes

which he has taken, is rarely complete and exact. The fact is that, little accustomed to auto-analysis, he has neglected certain symptoms. Further, he lays special stress upon those which are the most painful, or which incommode him most in his daily life. Some even come to ask advice for a single manifestation only, headache or vertigo, sexual incapacity, or loss of memory, etc., passing over the others in complete silence. Certain other patients, by way of contrast, may furnish me with so complete, so orderly a recital of their neurasthenia, that I mistrust them ; they have read the description somewhere, in a dictionary, in a popular medical work, in a newspaper article vaunting some special drug, and they apply it to themselves. They thus manage to make up a clinical picture of which at least half is unreal and fictitious. Frequently the symptoms of which they complain the most are those which are thus auto-suggested. Nothing is so dangerous for the public as this false science of newspaper and advertisement, which sows uneasiness, spreads error, engenders auto-suggestion. I am convinced that if at the present day so many neurasthenics live in dread of becoming insane, it is because they have read in the papers the accounts of many suicides attributed by the reporter to neurasthenia, or puffing newspaper articles which alarm the reader with the spectre of insanity in order to

induce him to buy a bottle of some nostrum. This vulgarisation of science, born of ignorance or bad faith, is deplorable to the last degree.

The function of the medical interrogation, therefore, is to make good all these omissions, to redress all these errors. This interrogation must be prudent, skilful, directed with the most subtle diplomacy. One must guard against the suggestibility of the patients who will be tempted to plead guilty to all the symptoms put before them. Let us clearly remember that the majority are the victims of apprehension. They fear that their ailment may be misunderstood, that the physician may find them less affected than their sensations lead them to think, that he may prescribe them an inadequate form of treatment. Then they will be tempted to exaggerate the importance of their discomforts, in the hope that he will pay more attention to them. One must, I repeat, proceed in this interrogation with the utmost precautions.

I then put questions to be answered.

First of all I make it my business clearly to define the symptomatology, to throw light upon the actual state of the patient. I put to myself the first question of my diagnostic problem, and my examination supplies the answer to my mind.

Firstly, I put myself the question: "This patient, is he or is he not neurasthenic?"

To this end I interrogate him successively concerning the main fundamental symptoms of depression, physical exhaustion and fatigability, need of rest and sleep, intellectual fatigue, difficulty in work, loss of attention, of memory, of will-power, gloominess, boredom, sexual frigidity.

There is one piece of advice of capital importance upon which I cannot insist too strongly, viz. never to pronounce before the patient the name of the symptom one is seeking. If one wants information concerning morning fatigue, for instance, one must not ask, "Are you tired of a morning?" for fear lest, with his dread of being misunderstood, he should answer affirmatively without being quite certain; one should rather ask, "How do you feel on waking in the morning?" He will then answer frankly, "Very tired, prostrated," or, "I feel fairly well in the morning." So with other symptoms the same precaution is essential.

Moreover, if upon certain points the answers have been equivocal and leave you in doubt, put the same question in another form. For instance, for constant fatigue in the morning, if you have not got a decisive answer, ask afresh, in discussing sleep, whether the sleep is restful, adequate, and you will get another reply which will be complementary to the first.

Of all these symptoms, signs of physical and intellectual fatigue are those of greatest value. It is their presence which really clinches the diagnosis of neurasthenia. According to their characters also we can estimate the amount of the depression. In this respect I have empirically divided neurasthenia into three degrees.

When fatigue only makes its appearance in the course of the day, we have to deal with the first degree. Already the organism lacks its adequate supply of energy, the normal expenditure of a day exhausts it too soon and too completely. This exhaustion, however, is not very great, since the repose of a good night suffices to restore it.

On the other hand, when the neurasthenic is tired from the morning onwards, the night is insufficient to restore the forces expended the day before. Fatigue is continuous, and does not disappear. Nervous over-excitement only serves to diminish the sensation of it towards night ; but functional exhaustion remains constant without returning to the normal level of energy. This is the second degree of neurasthenia.

Finally, in the third degree, the nervous over-excitement of the day is incapable of even lessening the consciousness of exhaustion. The nervous resources are dried up ; no stimulus will call forth any further effort.

In practice, the distinction between these three degrees, based upon the hour of appearance of fatigue, has always served me as a certain index. It permits of useful deductions as regards both prognosis and treatment.

At the end of this first part of the examination I have an answer to the first question, " Is the patient a neurasthenic or not ? " The responses given to my questions, the indications furnished by the patient's account, the points I have been able to elucidate upon the objective side of his trouble, have all served to enlighten me on this point.

In the presence of a depressed patient, one can hesitate, as a rule, only between neurasthenia and melancholia. The more particularly affective character of the latter psychosis, the existence of moral pain with unjustifiable self-accusation will enable us to decide in its favour.

Answer your own question, therefore, as to whether the patient is or is not a neurasthenic. According to the nature of your decision, then, either you will relegate him outside the boundaries of neurasthenia, in order to place him under some other neuropathic classification, or else you look upon him provisionally as a neurasthenic, with a reservation as to the exact nature and origin of the state of depression.

Here, therefore, is an affirmative answer to the first part of the problem provided by the

history, observation, and interrogation: the patient facing you is a neurasthenic.

The next point is to elicit an answer to the second question, " Why is he neurasthenic ? "

It is necessary at this juncture to bear in mind all the predisposing or exciting causes of the neurosis.

The predisposing causes which we have enumerated may be recalled to mind ; above all a defective constitution of the nervous system, which may be associated with degeneracy, then a general organic debility, finally, a pronounced state of arthritic auto-intoxication. As exciting causes we have included the infectious diseases (influenza, typhoid fever, malaria, tuberculosis, syphilis), the intoxications (alcohol, lead, mercury, tobacco, opium), the general organic affections (arteriosclerosis, anæmia, diabetes, gout), visceral affections (nephritis, prostatitis, urethritis, metritis, salpingitis), gastro-intestinal disorders, organic diseases of the nervous system (general paralysis, tabes, dementia præcox, paralysis agitans), the critical ages (puberty, adolescence, menopause, pre-senility), physical and intellectual overstrain, emotions, traumata, and, finally, the unknown causes of intermittent neurasthenia.

Two sources of information help us to solve this second problem : the answers of the patient, clinical examination.

Revert then to the interrogation.

Already, in the history of his complaint, the patient has given us details which may set us on the track. Frequently he puts upon such and such a cause the blame for his actual condition, digestive disturbances, influenza, overwork, emotions, etc.

Usually, however, it will be necessary to consider the past history, to elucidate one or two points which have remained obscure. It is rare in this respect for the patient's account to be quite accurate. For instance, the date at which his symptoms commenced is not the true one. He refers the illness back only to the appearance of the symptom which most attracted his attention. But on interrogation one finds that long before that he suffered from various affections—dyspepsia, constipation or diarrhœa, matutinal fatigue, etc.

He must also be asked whether the present attack is the first in his life. It will then often appear that he has previously had one or more attacks of the same kind, but of which he took little account, or which he had forgotten.

Then should be systematically passed in review all the exciting causes of neurasthenia, upon which the patient may be able to give us information, and he should be cross-questioned, using all possible care not to influence his mind. Herewith are questions bearing upon such causes.

CONSTITUTION

How long have you been a sufferer from nervous affections? Have you always suffered from them? At what period of your life? Under what conditions?

According to the affirmatives or negatives given in reply one will come to the conclusion either that a constitutional condition always existed, or that there had been an occasional attack with a healthy past, or more or less predisposition favouring depression from slight causes.

INFECTIONS

Have you had influenza, intermittent fevers, syphilis? Do you cough? Do you sweat at night?

NEURASTHENIA OF THE FEMALE GENITAL SYSTEM

Have you any uterine trouble, any excessive loss? Have you ever had any endometritis? Are you regular?

GASTRO-INTESTINAL AFFECTIONS

Do you suffer from indigestion? Are you troubled with acidity, heart-burn, sense of weight, distension, inclination to sleep after meals? Are

you constipated? Have you alternations of constipation and diarrhœa? What are the stools like? Do you suffer from colic? Is there mucus or membrane in the stools?

INTERNAL INTOXICATION

Are you rheumatic, gouty, diabetic?

EXTERNAL INTOXICATION

How much do you drink per diem? Do you smoke? Have you ever taken morphia?

OVERWORK

Have you been through a period of overstrain prior to your illness?

EMOTIONS

Have you had worry, responsibilities, emotions, griefs, money losses, or been disappointed?

All these questions, repeated if necessary in different forms, will give you information.

The next step is the bodily examination of the patient.

This examination must be carried out methodically, systematically, minutely, on the lines of every clinical examination, for the mistake must be avoided of many practitioners, who, because they are dealing with nervous disorders, suppose

that there is no organic lesion, and that it is useless to look in that direction. One should, on the contrary, search carefully to discover any organic affection which may exist, for the revelation and treatment of this organic affection are the best chances we have of instituting a really pathogenic and curative therapeusis. I have just seen a patient who for years has been lingering in a neuropathic state of depression and anxiety. He has consulted numerous physicians who have drenched him with a variety of drugs, but no one of them ever made him undress for an examination. I discovered in him an enormous dilatation of the stomach, reaching as far as the umbilicus. I am treating this dilatation, he is already much better, and I do not doubt that he will soon be cured. And there are many other similar facts which I have on record and could quote.

Be then, at this stage of the study of your patient, a clinical physician simply, a physician before being neurologist or psychologist.

Take once more into consideration the general condition as evidenced by the appearance of the tissues, the quantity of fat, the firmness of the muscles. Measure the strength of the latter with the dynamometer, their tone by the myotonometer. If you wish to be thorough, make an ergographic test. Note the figures obtained, which later may serve you for a comparison.

Examine the digestive tract.

The majority of neurasthenics, as I have said, suffer from digestive disturbance. One finds in them a furred tongue, a distended or dilated stomach, peristalsis.

If the liver is enlarged and tender to pressure, one may deduce hepatic insufficiency. The presence of indican and urobilin in the urine will confirm this diagnosis.

If the intestines are distended, tender on pressure, with rumbling in the cæcum, one would think of enteritis, the existence of which would be confirmed by colic, alternation of constipation and diarrhœa, mucus and false membranes in the stools.

Next consider the circulatory system.

The heart may be normal or may be accelerated in its action. Emotional tachycardia must be borne in mind.

Estimate the arterial tension. If it is low, deduce the existence of simple exhaustion, through diminution of general nutrition. If it is raised, suspect albuminuric, hepatic, gastric intoxication, arterio-sclerosis, pre-senility.

Examine the genital organs both in men and women, if you have any grounds for suspecting their integrity.

Finally, investigate the nervous system. As regards this you should find in the true neuras-

thenic only a slight exaggeration of the patellar reflexes. Any other sign discovered should be referred to an organic affection of the nervous system : Argyll-Robertson pupil, Westphal's sign, Romberg's, Babinski's, inequality of the pupils, tremors of tongue and limbs, etc. Given a man, between forty and fifty years of age, who, for no evident causes, is the subject of an attack of neurasthenia, always consider the question of general paralysis.

In the course of this examination, as in the course of the interrogation, one should always suspect suggestibility and auto-suggestibility in a patient, and if necessary trace them out. Frequently, the pains and the incapacities of which they complain are exaggerated or imaginary. It will be your task to accord them their true value. The following is my course of procedure. In the first instance I palpate, I percuss, I manipulate the patient, taking note of the sensations of which he complains. Then, a little later, I repeat the same manœuvres, unknown to him, distracting his attention in another direction. Frequently I am enabled to exert pressure on a region, move a limb, without any reaction on his part, or cause a gesture to be carried out previously pronounced impossible. My opinion is thereupon made up.

Finally, that your investigation be quite complete, have a urinary analysis carried out.

Doubtless the analysis of urines has not introduced into the problem of neurasthenia the elements of certainty which had been hoped from it, and for my own part, I must admit that it has led me into many errors. The results are too vague, too uncertain, too variable, in a large mass of patients varying so greatly one from another, to allow any very decided deductions to be drawn. The urinary variations proper to neurasthenia remain to be discovered.

Nevertheless, urinary analysis will at least inform us concerning the presence or absence of organic affections of the greatest importance. Diminution of the physiological constituents implies bad general nutrition. From phosphaturia or oxaluria, so common in neuropaths, you are led to suppose disturbance of nutrition in the nervous elements themselves. Excess of urea, of uric acid, discloses a gouty tendency. Bile, urobilin, indican, indol, skatol, betray hepatic insufficiency, intestinal fermentation. Sugar, albumen, reveal diabetes and renal disease.

When you have completed this exhaustive study of your patient, you will be in a position to answer the three questions which underlay the diagnostic problem.

Is he, or is he not, neurasthenic ?

According to your conclusion, either you will

exclude him from the class of neurasthenics in order to include him in another neuropathic syndrome, or else he will take the place that his neurasthenia marks out for him.

Why is he neurasthenic ?

You will here also be able to recognise the probable exciting cause or causes of his condition, and thus estimate the rôle which the predisposing factors play in his case.

To what type of neurasthenic does he belong ?

You will, finally, be capable of answering this last question, making use of all the information you have acquired.

Have you to deal with a simple neurasthenia, a pure condition of depression, which through accidental causes, has overtaken a well-balanced, sensible subject, and accompanied by no other neuropathic disorder, such as might be produced by an organisation naturally *tainted* by normal and morbid tendencies ?

Have you, on the contrary, to deal with a neurasthenia surrounded with complications of apprehension, phobias, auto-suggestions, developed upon a tainted soil, the blemishes being thrown into relief by the depression ? Have you to deal with a secondary accessory depression, engendered by some serious organic disease, which is in reality of primary importance—diabetes, albuminuria, arterio-sclerosis ?

Have you to deal with the premonitory depression of general paralysis or tabes ?

Have you to deal, on the contrary, with one of those trifling neurasthenias, the commonest, indeed, which, in a patient with a moderately resistant nervous system, has been engendered by some everyday cause such as digestive disturbance, overwork, emotion ? Are you dealing with one of the subjects called by Brissaud " neurasthenics and nothing else " (*les neurasthéniques tout court*) ?

You will be in a position to answer to all these questions, and according to your answer will depend the lines along which your treatment will be developed. I must, however, add that in many cases it will not be easy to offer a definite opinion from a single consultation. Other conversations, other examinations, will be necessary to elucidate points remaining obscure or doubtful. Hence the necessity, as we shall see later on, of " personal " treatment, of meeting the patient at close quarters, of seeing him daily, of being, as it were, attached to him in order to extract the whole truth, and to make use of all the means of cure. That is why an interrupted treatment of a neurasthenic or treatment at a distance seems to me almost impossible.

CHAPTER V

GENERAL RULES FOR THE TREATMENT OF NEURASTHENICS

BEING now familiar with the symptoms and causes of neurasthenia, we shall consider the problem of its treatment. But before entering upon the question of the indications in detail, it appears to me necessary to point out the main rules by which it should be inspired.

And in the first place here, as in all the other domains of pathology, a rational therapeutic method should above all aim at being causal, pathogenic, at removing the factors which have produced the disease. These factors have purposely been analysed. We know that they belong to two orders, predisposing and exciting. We shall then have to consider the various means at our disposal wherewith to combat them. Then we have to eradicate existing disorders. This constitutes symptomatic treatment in the true sense of the term, which will have the greater chance of producing a definite and permanent

cure the more completely the actual causes of the complaint will have ceased to act.

Finally, it will be necessary to take measures to avoid relapses; this constitutes preventive hygiene and prophylaxis.

What resources have we at our disposal wherewith to combat neurasthenia? They are on the whole those of general medicine, adapted to a certain extent to the special affection which we have to treat.

In the first place come the *hygienic directions* which should constitute the basis of every cure. We shall see how the counsels of physical and mental wisdom have to be multiplied, as well as instructions upon diet and suitable rules of life.

Physical agencies will occupy the place of election which they deserve. They possess over drugs the incontestable superiority in bringing about a cure of utilising the natural resources of the organism, of fortifying the organs and functions instead of vitiating or fatiguing them, of never leading to the formation of a habit. Hydrotherapy, massage, electrotherapy, air cures, work together in order to restore at once the general health of the patient and his nervous system.

Drugs are always to be looked upon as make-shifts. They should be used, too, no more than necessary, and under such conditions as to make

them as little harmful as possible. Moreover, one drug is never sufficient by itself, its rôle is only that of assisting nature in its spontaneous attempt at cure. It does not therefore represent an essential mode of treatment, but merely an adjuvant to other methods.

Finally, there is *psychotherapy*. Is psychotherapy indicated in neurasthenics, and under what circumstances ?

I would premise, before entering into any discussion, that psychotherapy is indicated in the treatment of neurasthenics as in that of all patients, whoever they may be, if by that term is meant the comforting action of the physician, the words of encouragement, the exhortations to hope which are to be offered freely to all sufferers.

Let us, however, cease dealing in vague generalities, and attack the problem at closer range.

In the first place, what do we understand by psychotherapy ?

One may say that it is the sum-total of means acting upon the mind of the patient in a curative sense ; psychotherapy is treatment by the mind.

It follows that there may be various modes of psychotherapy, which, in order to cure, may appeal to the various psychic functions.

In the first instance, *imagination* may be utilised by presenting to the consciousness of the

patient curative images. This is the method by suggestion, hypnotic or waking. Whether the subject be put to sleep by the preliminary suggestion of sleep, or whether he be awake, the therapeutist energetically affirms the disappearance of pain, of paralysis, of spasm, of tremor, etc., from which the patient may be suffering and, by virtue of the natural credibility, of the confidence he has in medical competence, the symptoms effectively disappear. This method is best applied to disturbances attributable to auto-suggestion, in which imagination plays the chief part. Treatment by imagination suits disorders of imagination. That is the reason that such suggestion has given the most brilliant results with the exaggerated disturbances of imagination, of classical hysteria.

When one is dealing with real disorders, or such as are kept up by a more recondite psychological mechanism, such for example as a chronic and intense emotional state, its successes are much less brilliant.

Suggestion can at the utmost temporarily give the patient the illusion of cure or amelioration. In fact, however, the affections which persist, along with their causes, do not fail to return as before.

The *emotivity* of the patient may then be utilised in a curative sense. The sthenic emotions

may be called forth in him ; joy ,confidence, hope, patience, resignation may be aroused. This is in substance what every physician does when he comforts his patient, talks to him with apparent confidence of his cure, inspires him with courage and hope.

In the third place, logical *argument* may be employed. It is this method which is nowadays extolled under the title of persuasion. Arguing, disputing with the patient, one demonstrates to him by proofs that he has got a false idea of his disorder, his errors are corrected, one instils into him truer and more accurate ideas.

Fourthly, one can appeal to the patient's *motor activity*, make him realise the attitudes of health, relearn a forgotten muscular adaptation, a function interfered with, combat a faulty gesture. This is in particular the rôle of processes of re-education.

Finally, the actual will of the patient may be cultivated. He may be taught to restrain his impulses, conquer his inhibitions, remain always, and in presence of all, master of himself.[1]

These various methods which I have separated by analysis are in practice mostly associated, at any rate the first three. As a fact, when one acts upon the mind of a patient, one generally

[1] Paul-Émile Lévy, *Neurasthénie et névroses*. Paris, F. Alcan, 1909.

influences simultaneously his imagination, his emotivity, his reason. When one asserts the disappearance of a symptom, when one obtains a patient's confidence, when one inspires him with hope, one is simultaneously exerting suggestion, will power, and persuasion. Thus authors who have sought to exalt persuasion into a novel and exclusive method commit a double error. In the first place, because it is practically impossible to act exclusively upon a patient's reason without simultaneously influencing his imagination and his emotivity. Further, because, from the earliest days of psychotherapy, every one who has made use of suggestion has lost no opportunity to reinforce his suggestive affirmations with sound arguments. The persuasive method is therefore nothing exclusive, nothing new. All physicians have employed it, at all times, instinctively. There is no novelty beyond the name and the doctrine applied to psychotherapeutics without the induction of sleep.

Having established these general conceptions upon psychotherapy, let us see what service the latter may render us in the case of neurasthenics.

In the first instance, if one admits neurasthenia, as I have described it, to be a real diminution of the activity of the nervous centres due to a functional or metabolic disturbance of the cell through exhaustion or intoxication, it is evident

that psychotherapy can have no specific or complete action against the very foundations of the disease. This rests upon an organic basis; the exhaustion, the difficulty in working, the depression and anxiety are real, not the products of the imagination, and it would not be possible by conversation, affirmations, or argument to dispel them promptly and completely.

Psychotherapy, therefore, is not to be looked upon as the specific for neurasthenia. The formula "Psychic treatment for a psychic disorder" is simply absurd, since a psychic disturbance may be the expression of a subjacent organic disorder, and this is what occurs in the case of the neurasthenic. The only accurate formula would be the following: "Psychic treatment for an imaginary disease." But it would no longer apply to the neurasthenic, whose disease is not imaginary. On the other hand it finds most suitable application to hysterics, whose symptoms are due to imagination, and who frequently recover in a semi-miraculous manner through suggestion.

In no case, therefore, can psychotherapy constitute a basis for treatment of a true neurasthenic. This must always be a physical treatment, such as I have indicated above, designed to restore the exhausted nerve-centres to their proper condition.

I am, therefore, a strenuous opponent of the pretensions of those authors who flatter themselves that they can cure neurasthenics by means of psychotherapy pure and simple. If they have thereby obtained results it can only be through two misconceptions: either they have been dealing with false neurasthenics, in whom the fatigue, the psychic impotence were illusory, imaginary, and in whom helpful suggestions have sufficed to correct their errors, or else they have simultaneously submitted their patient to hygienic, dietetic and medicinal treatment, to rest, to a regimen, to open air, in a word to physical treatment, and it is by a singular distortion of language that they pretend under such conditions to have wrought a cure by psychotherapy pure and simple.

If I may permit myself to hold an equally categorical opinion in face of eminent partisans of a contrary doctrine, it is because it is based upon the sole criterion which should determine our disputes and settle them—fact. It is a long time since I first entered the field of psychotherapy, about 1894, that is to say, eighteen years. At that period, given neurasthenic disorders, the essence of which was as yet little understood, the first thought that came naturally to the mind was to treat them by psychic action.

I began, therefore, by submitting my patients to suggestion, either hypnotic or waking. I was

lavish of every kind of stimulation, of reasoning, of decisive argument.

Soon, however, I was obliged to confess to myself that this proceeding was giving me no results. Doubtless I happened to relieve or cure patients, but upon analysing these cases somewhat closely, I established the fact that I was dealing with patients suffering from disorders of the imagination, through auto-suggestion, with those who were then called hysterics. True neurasthenics, whose nervous systems were really exhausted, these I did not cure. Occasionally, under the influence of my friendly words, they felt themselves relieved, comforted for a day or two. Then, my influence being spent, they relapsed into their misery.

I may add that, independently, M. Bernheim, who cannot, however, be suspected either for his competence in the matter or for his sympathy towards psychic treatment, has arrived at exactly the same conclusion, *i.e.* that psychotherapy is powerless against the true neurasthenic state, against the fundamental fatigue and depression from which the patient is suffering.[1] Is this tantamount to saying that psychotherapy is useless with neurasthenics? Such is far from being my thought. I have already declared that it has its value in all patients without distinction.

[1] Bernheim, *Neurasthénie et psychonévroses.* Paris, 1908.

The more reason that it can render service in neuropaths as impressionable as are neurasthenics.

Let us see in what forms and under what circumstances it is indicated.

In the first place, psychotherapy should only be employed in the waking state. I do not quite see the advantage to be gained in wishing to induce hypnosis in these patients, who, in addition, hardly ever go to sleep. Waking suggestion, therefore, may be used in these cases, by means of comforting, encouraging, reassuring words, accompanied by arguments, demonstrations, proofs, stimuli, active exercise, appeals to the will. All these processes will be mingled, naturally, according to the effect it is desired to produce.

There are three indications to the use of psychotherapy under these conditions.

In the first place it will serve, as we shall see farther on, to minimise the emotive and moral causes of certain depressions by inculcating in the patient the principles of philosophy, patience, resignation, and consolation.

Further, it will aim at modifying the mental state of the patient, at calming his anxieties, reassuring his fears, giving him courage, patience, hope, and gradually leading him back into the paths of will, energy, and normal life.

Finally, it will permit us to "energise" the entire practical application of treatment. By

this I mean accompanying every application with a strong dose of suggestion, announcing beforehand the exact result it ought to produce, bringing to his consciousness, by concentrating his attention upon it, the success with which it has been attended.

It is with this end in view that during each tonic injection, each application of electricity that I give the patient, I say and repeat, "This will give you energy and strength." It is with this end in view that after each injection, each electrification, I make the patient stand up, hold himself straight, walk with assurance, saying, "See how much stronger you feel, how much more energetic, more composed." And, generally speaking, he answers "Yes." The same course is pursued with other forms of treatment.

Briefly, in all your dealings with your patient, in all your therapeutic applications, suggestion should be ever present, on your lips, to be derived from your attitude, to reinforce the significance of all your acts, to emphasise their importance, to bring their effects into the field of his consciousness, to make them stand out in relief by concentrating attention upon them, to incorporate them, if I may say so, into his actual personality. Suggestion, constant and unfailing, should therefore animate the treatment, whatever it may be, as a breath of life entering the patient.

Nevertheless, it must be understood that treatment should essentially be direct and personal. Although all the therapeutic agents have their proper actions, their value certainly depends upon the manner in which they are applied. Hence arises the necessity that they should be applied by the physician himself, who should carry out every phase of the cure. Formerly, not having an installation of electrical apparatus, I used to send patients requiring electrical treatment to my colleagues. But it soon became apparent to me that they did not derive very favourable results from their sittings. Either the electrician made his application abstractedly, without the necessary explanations, without giving utterance to the suggestive and opportune phrase, or he delegated it to an assistant who talked even less.

It is therefore to my mind indispensable that he who wishes to treat a neurasthenic with the greatest chance of success should have at hand the entire therapeutic arsenal necessary to carry out the treatment in its entirety. He must combine the functions of electrician, masseur, doucheur, psychotherapeutist, and general physician, a judicious specialisation consisting not in the employment of a routine treatment, but much rather in the utilisation of every treatment for the same class of patients.

This personal and direct treatment naturally

demands frequent, almost daily, contact between patient and physician, a consequence which is not only advantageous but even indispensable. It is in fact necessary that the patient should be subjected without cessation to medical influence throughout every stage of the cure. The therapeutist must always be at hand to superintend its course, to guide its details, to intervene actively every time that some unforeseen event occurs to derange or discourage the patient. For it must not be supposed that the treatment of a neurosis leads the neuropath to a cure by a straight road devoid of obstacles. In the most favourable cases there occur difficulties, recrudescences, relapses which are to be expected and foreseen. The neuropath, like all normal people, has his good and bad days, and if the good days light in him the torch of hope, the bad ones render him desolate and disheartened. It then becomes necessary to reanimate his confidence, to restore his shaken hope, to inspire him afresh with patience to await the return of amelioration. Briefly, the physician should always be present to guide him by the hand towards the portals of cure.

Under these conditions one can understand that daily intercourse is necessary, and that treatment of neurasthenia at a distance, whilst the patient is left to his own resources, to the

mercy of all his anxieties and all his auto-suggestions, will have no chance of success.

It is easy to understand also that the personality of the physician will here play a rôle of first importance. Imagine a physician himself anxious, doubting, irresolute, depressed, in one word neurasthenic, and who would undertake to cure other neurasthenics !

He who devotes himself to such cures must be robust, in sound health, of equable temperament, sure judgment, firm will, in no way neuropathic. He must possess the necessary patience to listen without fatigue to the interminable complaints of his patients, all the confidence in himself which inspires that feeling in others, all the energy necessary to make up for their deficiencies, and not himself give way to their dejection.

He must also possess the psychological sense, *i.e.* that innate aptitude at divining what is passing in the brains of others, at assimilating their individual impressions, that intuition which enables the most subtle alterations in the mental processes to be appreciated. Only under these conditions will he understand his patient, and the latter only gives his confidence when he feels himself understood.

Finally, he should possess a serene resignation, a lofty indulgence, a compassion devoid of bitterness. He who elects to make the care of neuro-

paths his task must from the first accustom himself to every form of abnegation. Amongst our egotistical patients, neuropaths, and particularly neurasthenics, easily hold the first place. Whilst expecting everything from their physician, holding everything to be their due, attention, patience, devotion, friendship, they give nothing in return. Their gratitude is nothing but a word which passes as they open their lips. How many patients I have had under my care who have said with emotion, "Doctor, if you cure me, I shall be eternally grateful." I have cured them, they have disappeared, and I have never heard from them again.

Their ingratitude, however, must be forgiven them. Let us remember that, even cured, many of these potential neurasthenics remain anxious, weak-willed. Let us console ourselves with the thought that they lack the determination to express their gratitude, and that, even silent, they may be thinking of us. Let us also console ourselves with the thought that we work for art, for beauty. Let us find in our inner satisfaction the greatest of our recompenses, and count neither on the gratitude nor the generosity of our patients to repay us for our efforts.

A few words, in conclusion, upon isolation.

It is, in general, useless to isolate the patient, the seclusion ordered by the physician being most

frequently only a disguised avowal of incapacity or indifference. On the contrary, every effort should be made to treat the patient in his surroundings, without disturbing his family and social life.[1] One can then judge of his real progress, and not wrongly attribute his amelioration to the artificial conditions in which he has been placed. Moreover, the surroundings which have engendered his neurosis are those to which he will some day be compelled to return. Does one not then risk seeing him relapse when placed once more in the same emotive conditions which have induced his disorder ? It is preferable, therefore, to accustom him to live amidst his emotions, to train him to combat them, habituate him to overcome them, in a word to live his life whilst curing them. That is why unconfined treatment seems to me to give results infinitely superior in the way of permanence to those obtained in a sanatorium or a house.

In certain cases, nevertheless, where it is absolutely necessary to withdraw the patient from unfavourable influences, one must resign oneself to prescribe isolation.

These means taken together, hygienic, dietetic, physical, medicinal, psychotherapeutical, should constitute a system by which the patient is en-

[1] Paul-Émile Lévy, *Neurasthénie et névroses.* Paris, F. Alcan, 1909.

tirely surrounded, a sort of field army by which his neurosis is attacked from every point. And thus, guarded on every side, the patient will have the feeling that his complaint is taken seriously, that the causes have been laid bare, that one possesses the necessary resources wherewith to bring about a cure. And then he will say to himself with satisfaction, "Here at last is a physician who understands me."

CHAPTER VI

TREATMENT OF THE PREDISPOSITION

We have enumerated three main conditions capable of producing the exaggerated potentiality of fatigue of which neurasthenia is only the clinical expression.

First and foremost there is a *defective constitution* of the nervous system, which may be included with the large class of nervous disorders whose sum is degeneracy. Unfortunately we know absolutely nothing of the inner nature of these deeply-rooted taints, and in consequence are powerless against them. It has not yet been discovered wherein lies this special vulnerability of the nervous tissues; treatment also remains impotent.

The second condition is *a state of weakness, of general debility of the organism,* of delicacy of the tissues, of weakness of the organs, of poverty of blood, which appears to react upon the nervous system, and leads to its lack of resistance.

Here we are a little less powerless than before.

Doubtless we must never hope to transform one of these puny subjects into a giant, but by wise measures we may to a certain extent modify this general debility.

The treatment suited to him is the every-day one of organic weakness, of physiological poverty, of anæmia.

In the first rank come hygienic directions and physical agencies.

Air and sun cures, under such conditions as are possible to the patient, sojourn in the country, in the mountains, at the sea. Preference will be given to one or other of these in accordance with the susceptibility of the individual patient. In this respect there are no general rules. Whilst there are many neurasthenics whom the seaside does not suit, where they become enervated and sleep badly, others, on the contrary, feel very well there, as though the wind and air stimulated their weakened functions. Removal to the hills, at a moderate height, from 1500 to 3000 feet, succeeds in the greater number, but the simple country, in an agreeable locality, often gives equally good results. In my own practice I usually leave to the patient himself the responsibility of choosing the place of his sojourn in the country, within reasonable limits. It is rare for him not to have some antecedent experience, not to have spent some time at the seaside or in

the mountains, having thus tested their respective influences upon his temperament and nervous system. Knowing thus what suits him he will be able to come to a decision. It may be added that there are frequently accessory motives, admitted or concealed, which weigh with him in his choice. Therefore, short of some absolute contra-indication, I let the patient go where he will, convinced that the place likely to be most successful will be that which pleases him best.

Hydrotherapy.—The above case may be assisted by the practice of hydrotherapy. I would here establish it as an inviolable principle that such hydrotherapy must always be very gentle, never energetic or violent. The nervous system of such patients is too delicate, too fragile, to support the least shock, the least injury, which might produce momentary stimulation to be followed by further depression. Moreover, there should be no cold douche, nor even Scotch douche, no jet under pressure. I prescribe a tepid overhead douche or spray, or, even more simply, a tepid sponging which the patient can carry out in his room of a morning and before dinner at night without trouble and without fatigue. The douche or sponging should be followed by dry rubbing with a fibre glove or with a spirit lotion, such as eau de Cologne, after which the patient rests for half an hour.

Electrotherapeutics.—As with hydrotherapy, the methods employed must be gentle ones.

The simple static bath, much recommended by certain authors, has always appeared to me to be absolutely inefficacious. It is only justified by the short sparks that can be got from all parts of the body and which produce a favourable stimulation of the sensory nerve terminals.

General faradisation with the brush or pad acts in a similar manner, but one must avoid producing strong muscular contractions which might lead to a risk of overwork. Rhythmical galvanisation of the muscular groups, and the sinusoidal current bath are indicated under the same conditions.

Generalised *massage*, always provided it be lightly applied, will equally be of service.

Finally, *judicious superalimentation* may be prescribed, meat and eggs forming the basis. Although a meat diet may be useless or even harmful for certain temperaments, there are others, on the contrary, for whom it is absolutely necessary, meat constituting a veritable opotherapy for muscle and blood. This is the case in our debilitated neurasthenics. Do not, therefore, fear to order them meat at every meal, roast or grilled, and underdone. Give also meat juice expressed in the cold between meals, *e.g.* a cup at 10 A.M. and 4 P.M. Recommend also eggs in

large numbers, six to eight a day, taken raw or in the customary forms. These directions are naturally to be given subject to other possible dietary exigencies, such as may be necessitated by digestive troubles.

In all cases, the recommendation to eat slowly and masticate carefully must never be forgotten. Another form of excess feeding, as convenient as it is efficacious, consists in making the patient assimilate large quantities of sugar. It is unnecessary here to insist upon the alimentary value of sugar, which has been demonstrated by many experiments. Sugar possesses all the tonic properties of alcohol without its exciting action ; it is therefore a substance to be specially chosen for all those who are debilitated. This is how I recommend its administration. Dissolve 8-10 oz. of sugar in a quart of boiled water, which the patient can drink by the glass during the day, in intervals between meals. It may be flavoured with a little essence of mint, orange-flower water, etc.

Such are the hygienic and dietetic recommendations suitable to this category of invalids. These prescriptions are familiar and classical, and yet how many patients has one not seen to whom they had never been given, when they might well have sufficed to cure them of their neurasthenia ?

Let us now pass on to the question of *Drugs*.

They are numerous, the only difficulty being to make a choice.

I will later discuss the question of opotherapy. In the debilitated subjects with whom I am at present dealing there can be no doubt that the secretory glands are subject, in company with all the other organs, to a diminution of activity, that glandular insufficiency exists. Opotherapy therefore appears indicated upon theoretical grounds. Frequently in these cases thyroid gland in small doses, $\frac{1}{3}$ grain per diem, helps to brace up the general condition. But it is still more advisable to administer concurrently the products of secretion of all the other main glands: spleen, supra-renal, pituitary body, ovary in women, testicle in man. I sometimes prescribe in such conditions a polyglandular extract which meets these indications.

We now come to the classical remedies.

Arsenic will be prescribed in the form of arseniate of soda in a mixture, or as drops of Fowler's solution, or as injections in the shape of cacodylate of soda.

Iron is indicated whenever anæmia is recognised. Oxalate of iron (gr. $1\frac{1}{2}$) may be ordered with each meal, or some other ferruginous preparation.

Phosphorus may be prescribed as phosphate of soda, gr. 10-30 a day, or in the form of glycero-

phosphate, which constitutes the basis of many tonic elixirs.

Iodine is likewise a good stimulant of nutrition : five drops of a mixture of equal parts of tincture of iodine and chloroform with meals.

Finally, if weakness is very great, have recourse to injections of artificial serum. Inject daily 5 grammes of Chéron's formula, or 10 grammes of the attenuated formula of M. de Fleury.

In cases of great interference with nutrition, of grave debility, there remains the heroic remedy of *rest in bed* for one or more weeks, the Weir-Mitchell cure.

A third predisposing cause of neurasthenia has appeared to me to be a marked condition of **arthritism.**

Here therapeutic action must be directed by all means known to us towards rectifying disordered nutrition and eliminating internal poisons.

In the first place avoid the introduction of alimentary poisons and prescribe a definite dietary. There should be absolute prohibition of fish, shell-fish, game, preserved foods, strong cheeses, and abstention from wine, beer, spirits, tea, coffee. Meat should be taken only once a day, preferably at mid-day. All meat is allowed, but internal organs, heart, liver, kidneys, brain, etc., forbidden. Fresh vegetables should be given in large quantities

—beans, peas, spinach, cooked salads; farinaceous foods only in moderation; stewed and fresh fruit if digestion permits.

In all such patients, who are generally big and particularly rapid eaters, insist upon the necessity of eating very slowly and masticating with care before swallowing.

In order to stimulate nutrition we have further recourse to physical agencies.

Massage will aim at increasing the activity of the circulation, at eliminating the waste products which encumber the tissues, at dispersing the deposits of fibrositis.

Electricity in the form of *rhythmical* galvanisation, or the sinusoidal current bath, will induce vigorous muscular contractions.

Finally, *exercise* suits all these patients, provided it is in moderation, stopping short of the limit of fatigue.

To dispel these poisons we can act upon three channels of elimination.

Firstly, the intestines by means of purgatives, to which end regular purgation may be prescribed, *e.g.* once a week.

Secondly, the kidneys. I make such patients take every morning, for ten days in a month, two tumblers of Vichy Grande Grille, warmed, which has the advantage simultaneously of acting upon liver and kidneys. The waters of Vittel, of

Contrexéville, will be of special advantage to the gouty. Further, an annual cure is indicated for these patients. Let them therefore be sent to Vichy, Vittel, Contrexéville, Evian, Aix, where taking the waters will be associated with massage and hydrotherapy.

A further method of elimination too much neglected is the skin. There is a very convenient method of promoting cutaneous elimination, which is to make the patient two or three times a week take a dry-heat bath by means of one of the portable appliances of waterproofed cloth now on the market. This calls for no loss of time, may be carried out at home, and is extremely economical, costing nothing but a few pence for methylated spirit. The patient, taking his place in the box for twenty minutes, perspires abundantly and loses some 9 ounces of fluid. The Dowsing light baths have a similar effect.

Another important means of ridding the system of toxins is the cure of Guelpa, three days' fasting, with saline purgation in the morning, and purification of the blood by means of 200 to 500 grammes of physiological serum. This will naturally be reserved for subjects with a high degree of toxæmia. Nevertheless, I am not averse from prescribing for my arthritics a fasting cure regularly every week. This absence of food for a whole day, to which one gets rapidly accustomed,

through the phenomena of autophagy to which it leads, creates eminently favourable alterations in the general nutrition, the happy effect of which is seen the next day in a feeling of lightness and well-being.

CHAPTER VII

TREATMENT OF THE EXCITING CAUSES

In this chapter we shall remain almost entirely within the domain of general medicine. Indeed, the majority of exciting causes are no more than the everyday affections of internal and external pathology, and they engender neurasthenia only because they act under somewhat special conditions upon a predisposed nervous system. Here again the neurologist must give way to the physician. This offers another example of the necessity of every specialist, no matter to what branch he may devote himself, being first and foremost a physician.

The treatment of the majority of these exciting causes being classical and appropriately described for each of them, it will be unnecessary for me to describe the details.

The **infectious diseases** such as influenza, typhoid fever, interest us only at the time of convalescence, when they leave behind them a nervous sequel of asthenia. It will therefore

be appropriate to apply to them the above-described therapeutics suited to general debility, amplified by the treatment of asthenia, which I shall indicate later on. Malaria, tuberculosis, syphilis, demand in the first place their specific treatment; occasionally one may be able, by means we shall discuss later, to combat their accompanying asthenia.

The question of **exogenous intoxications** may be dismissed in a few words: suppress the use of the poison. This may be accomplished by tactics which will vary according to the individual cases.

Amongst the **organic affections,** diabetes, gout, arterio-sclerosis, anæmia make no claim upon any special consideration. They will be treated by the usual methods, as will be **visceral affections,** nephritis, urethritis, prostatitis, endometritis, etc.

The **organic affections of the nervous system,** which are ushered in by a phase of depression, unfortunately remain, as we know only too well, rebellious to all treatment. We look on at the course of events, unable to check their fatal development.

The **critical periods** in human evolution demand interference on somewhat different lines.

The neurasthenia of growth, of puberty, is above all a neurasthenia of debility, of anæmia.

The young patients will therefore be submitted to the general hygienic measures described—open air, tonics, etc. It will, of course, be necessary to diminish or entirely suppress all work in the case of school children or students. If the condition is severe, the patient is confined to bed. As this form of neurasthenia frequently coincides vexatiously with the periods of examination or competition, it would be disastrous for the future of the young subject to enforce entire suppression of all work. I have on several occasions had the satisfaction, thanks to an extremely opportunistic mode of treatment, of permitting candidates to prepare for and submit to these tests, despite their depression. Whilst increasing the patient's tone by the most energetic methods, whilst adding to his income of energy, I reduced his expenditure to a minimum, prescribing long rests in bed, work preferably in a recumbent posture, with intervals of absolute repose.

One is thus enabled to obtain a nearly satisfactory equilibrium between fatigue and its restoration. In the neurasthenia of adolescence the cereal decoction recommended by Springer may with advantage be prescribed. The following is the formula: wheat, barley, oats, rye, maize, bran, two tablespoonfuls of each in three litres of water. Boil for three hours so as to reduce the quantity to one litre; allow to cool. Pass through a fine

sieve. Drink the decoction, a glass at a time, throughout the twenty-four hours.

The neurasthenia of the menopause, of presenility, is to be looked upon as a neurasthenia of toxic origin, due to hepatic or renal insufficiency, to vascular and visceral sclerosis. The various procedures indicated here are those of disintoxication such as are applicable to cases of arthritism. In women, ovarian extract, in men testicular, may be prescribed. The patient must also be given to understand that this onset of slackening in his energies is a warning which implies the necessity of moderating his work, of thinking of rest, of minimising fatigue for an organism which is experiencing the first inroads of senile decay.

I have purposely left to the last in this enumeration the question of **digestive disorders.** These affections play a primary rôle in the pathogenesis of the depressive neurosis ; they are at fault in the majority of cases. The greater number of neurasthenics are atonic dyspeptics with dilatation. They have furred tongues, sluggish digestions, distension, flatulence, often stasis with visible peristalsis. The presence of dyspepsia is so constant in these patients, and its priority appears so clearly demonstrated by the clinical enquiry that, in my opinion, gastric disorders should be considered one of the most important causative factors of

neurasthenia. Hence the necessity of a judicious and strict alimentary régime.

The stomach of the neurasthenic is a tired stomach. Consequently the whole aim of treatment should be directed towards demanding of this organ the least possible effort in performing digestion. The patient should therefore be permitted only easily digested viands. In the first place may be put roasted and grilled meats: beefsteaks, cutlets, leg of mutton, veal, etc. Eggs, also, may be given, in fairly large quantities, *e.g.* two at each meal, and if possible two, raw, at breakfast and two in the afternoon. Vegetables fresh and green, such as peas, French beans, spinach, sorrel, cooked salads, may be boiled in water, with a little fresh butter added at the moment of serving. Stewed fruits and compotes are also permissible, together with bread-crust, toast and biscuits. On the other hand, I absolutely forbid broths and soups, stews and meat garnished with sauces, fish, game, indigestible vegetables such as cabbage, cauliflower, Brussels sprouts, cucumbers, as well as farinaceous foods, macaroni, cakes, cheese and milk-foods, salads and raw fruit. All food should be eaten slowly and masticated with care.

There are one or two points to be considered in this diet.

In the first place the neurasthenic ought to eat

meat. Being a weakling, he requires meat to build up his blood and muscles. It is only in the case of a demonstrably gouty subject, suffering from serious hepatic mischief, Bright's disease or enteritis with putrid stools, that meat should be reduced. In the ordinary neurasthenic, however, there is no sort of contra-indication to a meat diet. I would add that, in opposition to what many think, meat is perfectly digested by dilated stomachs, it causes no fatigue, no flatulence or distension. The physician should therefore in this respect dispel with all his authority the spectre of enteritis, combat the mania for vegetarianism, the fashion for which has under its spell the majority of our contemporaries and too many of our colleagues. How many patients have I not seen, who, because they complained of vague digestive troubles, have been subjected to severe régimes, deprived of meat and eggs, and crammed with farinaceous food, becoming progressively weaker and weaker, and falling into an ever increasing state of neurasthenia! I have in such patients had to combat a veritable phobia against meat, in which the neurasthenic sees a poison envenoming his bowels.

I should say the same about eggs, which some consider an inexhaustible source of toxins likely to infect the organism. I have observed nothing of the kind in practice, whilst on the contrary I

have often noted the good effects of excess feeding by means of eggs. There is nothing more logical ; do not eggs contain lecithin, which is useful in the restoration of the nervous elements ? Instead of prescribing minimal quantities of yolk of egg in dried form or of injecting oily solutions, it is far simpler to administer it naturally by the mouth.

I forbid fish of every kind because it has seemed to me that it was far more difficult of digestion than meat and eggs, and also because, being rarely sufficiently fresh, there is a risk of introducing toxins of decomposition, which exert a deleterious influence upon the nervous system. The same holds true of game.

Milk and milk-foods are badly borne by tired stomachs. It was one of those innumerable therapeutic errors, of which there are so many in medicine, to put all dyspeptics on a milk diet, as was done some twenty years ago. Clinical experience shows that in reality milk is slowly digested, that it ferments in the stomach, with production of gas, and that, far from minimising dilatation, it increases it. Numbers of my patients subjected to a milk diet before consulting me, have found their gastric functions improve considerably by simple abstention from milk.

Farinaceous foods, pastry, macaroni, purées, which have been and still are so liberally prescribed, produce equally disappointing results.

They encumber the stomach with a thick and heavy mass which increases the distension of the enfeebled walls, whilst their nutritive value is very mediocre. In this vogue of farinaceous food indiscriminately recommended to all patients, we see an example of one of those blind generalisations and of that unreflecting spirit of imitation running counter to clinical good sense and sound logic. Because certain specialists, mostly foreigners, have prescribed cereals in cases of enteritis with putrid fermentation, the main body of practitioners have made a panacea of this in all digestive disorders. It is exactly the same to-day with farinaceous food as it was formerly with milk; this fashion will be dropped as was the other. As a fact, the cases in which a farinaceous régime is indicated are in daily practice sufficiently rare. It may be that the specialists to whom drift the enteropaths from the whole of Europe see large numbers of these. For myself, as a neurologist, I can say that in fifteen years, out of the fairly respectable number of neurasthenics that I have had occasion to treat, I have only seen a few cases.

Salads and raw fruit appear to me to be obviously indigestible. "They don't pass on," as such patients say. We shall therefore be well advised to recommend their being cooked and administered in the form of jams and compotes.

Let us now consider the problem of beverages.

I make it a rule to forbid all drinking with meals and prescribe a strictly dry diet. Experience shows that the dyspeptic digests better and more quickly if he does not drink whilst eating, doubtless because the fluid taken dilutes the gastric juice, diminishes its activity to that extent, and demands of the glands an excessive amount of secretion. It is probable, too, that the fluid ingested, augmenting the volume of the gastric contents, favours its relaxation and dilatation. However this may be, there is no doubt that even the healthy individual feels himself lighter, more active, after his meal, if he has not drunk whilst eating. It is for the same reason that I forbid broths and soups.

The patient, therefore, will drink nothing with his meals, but only during the intervals. Generally, when I announce this prohibition of fluid to my neurasthenics, who habitually drink largely with their meals, they are startled and protest, "Then I shall be unable to eat anything." This is a mistake; drinking with meals is an artificial necessity, a habit which is forgotten at the end of a few days. Moreover, there is a method of palliating this inconvenience; the patient should drink freely, one or two glasses, an hour before each meal. Thus, when he sits down to eat, he will already have had his ration of fluid, his tissues

will be sufficiently hydrated for him not to suffer from thirst. He will thus drink between 11 and 12 o'clock and between 6 and 7. As this quantity is insufficient for the twenty-four hours, during which at least 35 ounces of fluid is necessary, he will drink again at 4 or 5 o'clock, but never less than three hours after the end of the preceding meal.

What should the neurasthenic drink? Water for choice, plain spring water or water feebly mineralised. Effervescent water is not suitable; it should be rendered flat before being taken. I allow those who do not like plain water to flavour it with a few drops of essence of peppermint, orange-flower, or some syrup. They may also take infusions of lime, camomile, orange-flower, anise, etc., warm in winter, cold in summer. As regards habitual beverages, wine, beer, tea, coffee, liqueurs, etc., they are absolutely forbidden. All these stimulating beverages act upon the nervous like a lash, thanks to which they have a feeling of well-being, which, however, is succeeded by a more profound sense of depression.

The patient should lie down after each meal for at least an hour without going to sleep. He thus husbands simultaneously his stomach, his muscles, and his nerves.

This is the régime which is suited to the neurasthenic with dilated stomach; as a rule it succeeds admirably. Under its influence one gradually

sees the tongue clean, digestion become easier, the stomach resume its normal proportions.

As far as drugs are concerned, I do not prescribe any. Even those enjoying the greatest reputation in these cases, such as nux vomica, hydrochloric acid, pepsin, have never seemed to me to have any particular action. It is better therefore to abstain altogether from giving any, thus avoiding the introduction of another foreign substance into an already exhausted organ.

In cases of very marked dyspepsia with high degree of dilatation I have found the advantage of combining this régime with electro-therapeutics. One may act upon the stomach, either by means of the continuous current passing from an epigastric to a dorsal flat electrode (50 m.a. for 20 min.), or from an electric bougie and an epigastric electrode, with interruptions. Energetic contractions of the gastric muscle are thus induced, gradually bringing it back into a condition of normal tonicity.

In cases of stasis lavage will also be useful.

Neurasthenia sometimes appears to be kept up by a chronic enteritis. It will be advisable in such cases, but only when the indication is clearly marked, to order a farinaceous diet, to which are added lactic acid bacilli or simply lactic acid solution 1 in 1000.

Constipation acts very disadvantageously upon

the depression. It is essential to combat it vigorously, but rather with dietetic than medicinal means. This is the advice that I give habitually: every morning, fasting, a glass of water. This is followed by abdominal exercises, consisting in lying down upon a hard surface and raising the body, without using the hands, twenty times in succession. Then for breakfast *café au lait.* Quarter of an hour later the closet should be visited with or without inclination. If these means are insufficient, a suppository of cacao-butter, glycerine, castor-oil, or a small injection of boiled water may be employed to stimulate defæcation, or even an ounce or two of olive oil retained all night. In chronic constipation electrical treatment with continuous, interrupted, or sinusoidal current, according to the case, gives excellent results. By its means I have often cured constipation of long standing in twenty to thirty sittings.

Overwork, physical or mental, demands no other treatment beyond abstention from it. The patient must, therefore, resign himself to relinquish, or at any rate in large measure diminish, his efforts. It is, however, the accompanying emotional condition which leads to the nervous depression of overstrain. **Traumatism** is deleterious in the same way through the emotional shock which is bound up with it.

It is, then, in the last resort the **emotive causes** which we must attack. These have been dealt with in Chapter II. ; they all belong to what used to be known as the depressive passions.

Two eventualities may be present.

First, the emotive cause is an emotion of old standing, which has provoked an attack of neurasthenia, but which is no longer active. Such is the case of a man who has been through a period of business difficulty, of anxious thought. Things have, however, righted themselves, and he is to-day only suffering from the nervous fatigue which has been left by these emotions. Such is the case of another who has undergone a keen disappointment or deception. Eventually he has made up his mind and has consoled himself. Nevertheless, although he no longer thinks about it, there remains a condition of depression which he is unable to shake off. The same applies to the victim of an accident who has undergone a violent shock. Even although the event may be a thing of the past, already almost forgotten, he still is subject to the depression. In all these cases, the emotive cause having ceased to act at the moment at which you intervene, it is beyond the reach of therapeutics. This reduces itself to treatment of the other physical causes which may exist and to that of the state of asthenia.

It is different in the second eventuality. Here

the emotive cause is operative, always present; it acts daily upon the patient, depressing and upsetting him. This is the case with the man who finds himself face to face with business difficulties which he is unable to resolve. This is the case with a household, in disagreement over material or sentimental questions, where scenes are re-enacted daily at every meal. This is the case with a widower who has lost his wife, with a mother who has lost her child, and thinks of the lost one without ceasing, mourns and weeps, unable to forget or to console herself. In all these cases emotion acts in a permanent fashion, weighs upon the thoughts of the patient, discourages him, crushes him.

There is, moreover, nothing more difficult, more thankless, than to undertake his cure. The physician has to constitute himself the confessor, the confidant, the friend, the ally, of his patient. The latter must describe to him, in all its details, his material and moral situation, confess all his moods and internal conflicts, so that together they may seek the solution of the problem. Frequently the interested principal does not see clearly; it is the duty of his counsellor to put things in their true light, to clear up obscurities, to discover the favourable conditions in the situation, the hopeful points. This is a delicate and difficult task. The physician here has to convert himself

into a professor of practical philosophy, of will, of courage. He has to teach the wisdom of accepting the inevitable, perseverance in the fight, strength to live, expectation of better times.

The doctrine of practical philosophy which I frequently expound to my patients might be called *armed resignation*. The existence, the fate of every one of us is bound up with two varieties of determining factor: on the one part, our personal effort; on the other, the hazard of circumstance. There are, therefore, things which depend upon us and things which are independent of us, as it was formulated in the Stoic philosophy. Against the latter we can avail nothing; it is useless to rebel against a concourse of events which escapes our direction. We can only oppose against it a wise resignation. All the more ought we to do, with all our strength, that which depends upon us; put forth those efforts which will lead us to the goal in sight, neglect no precautions and conditions which may favour a happy issue. If we succeed, so much the better; we shall have the right to congratulate ourselves upon the victory. If we fail, so much the worse; but as we shall have done all that was possible, we cannot reproach ourselves; we shall have an easy conscience and need only bow before the inevitable, with a simple resignation, with the resolution

without discouragement to recommence our endeavour.

In accordance, therefore, with the nature of the emotions that the patient may have undergone, I should adapt to his particular case this practical philosophy. There will thus be diverse types of philosophic conversations to be held, according to individual circumstances.

To him who has been wounded in his self-respect one must point out that humanity not being at all charitable, too much importance must not be attached to its acts. One must live for one's own conscience in the first place, not for the opinion of others. What signifies the spite of an ill-willed or malevolent person? The proper attitude is that of scorn and contempt.

To him who has been disappointed in his efforts, it must be demonstrated by examples taken from history that endeavours are rarely successful at the first trial, that the most famous have had reverses, that to succeed once there must on an average be ten attempts, and that, in the end, with enlightened persistence, success awaits us. The important thing is to begin again.

To him who has suffered disappointments in love, it must be shown that the human heart is full of illogicalities and caprices, that feelings cannot be commanded, that if the object of his

affections is drifting away from him, it is not his fault, and that, in truth, there is more than one woman and one man on the earth, and that the world at large holds many consolations in store for him.

In the case of a patient who has lost some one dear to him and remains inconsolable, appeal must be made to the religious feelings, to the hope of a future life, to a reunion in the world beyond, or if he is capable of taking an interest in it, to the doctrines of spiritualism. What do illusions matter, provided they are consolatory and help to make life endurable ?

Such is the moral treatment of emotive causes, treatment of necessity adaptable, refined, subtle, concerning which it is impossible to lay down general rules, as it must be suited to the individuality of each subject and each case.

Since all these patients suffer in general from irritability of their entire emotional apparatus, it will be necessary to utilise the means to be described later on in order to diminish the exaggerated emotivity. If the emotive conditions which surround the patient are such as continually to militate against cure, it will be necessary to recommend isolation or at least temporary removal from such surroundings.

CHAPTER VIII

TREATMENT OF THE FUNDAMENTAL ASTHENIA

I HOPE that I have made it clear that neurasthenia consists essentially in a state of nervous depression the diverse symptoms of which, whether they be those of functional insufficiency or irritability, are only clinical expressions.

In conformity with this conception one can likewise understand that the essential treatment must aim at combating this depression, at raising the nervous potential, and that, following upon this relief, all the disorders which were only external manifestations ought to disappear.

Having attempted to suppress the predisposing and exciting causes, let us then see how we may combat the fundamental depression which they have produced.

There are two means at our disposal which constitute the therapeutics of asthenia : rest and neuro-tonic medication. They simply correspond to the economic condition which is enforced in a

similar case ; diminution of expenditure of energy, increase, if possible, of receipts.

Rest. — The neurasthenic is an exhausted being. What suits him best is repose. By that I mean not absolute repose, the absolute suppression of all work and effort, but a simple diminution in the expenditure of energy, a wise discrimination in the utilisation of physical and intellectual energy. The cases, indeed, where absolute rest, confinement to bed or to an arm-chair prove necessary, are rare. This exigency arises only in grave asthenias, which we shall discuss later on.

As a rule it suffices simply to prolong the number of hours which the patient habitually spends in bed. On an average eight hours are spent in bed at night. I therefore advise my patients to spend ten or even eleven or twelve hours daily in bed, to go to bed earlier and get up later, even if they do not sleep. For many patients tell me, " It is useless for me to remain in bed of a morning, I cannot sleep." This is a mistake. Even without sleep rest in bed is greatly beneficial to the neurasthenic.

I have noted fairly frequently, too, in this respect a sort of scruple upon the subject of this prolonged rest. Certain patients fear to give way to their natural inclination to lie down for fear of developing indolent habits. On the contrary, they fight against it, force themselves to rise and

be active. This is another mistake which must be combated. I tell them, "The fatigue and inclination for rest that you feel are the natural needs of your suffering organism. Just as hunger betrays the need of eating, thirst that of drinking, so fatigue betrays the need of rest. Far from fighting against this need, you should, on the contrary, satisfy it as far as possible; it is one of the paths leading to cure of the disorder."

There are also others who raise the objection that the more they remain recumbent, the more tired they feel. This is an accurate observation. With the absence of nervous stimulation in the horizontal position they perceive more keenly the sensation of fatigue which, on the contrary, is reduced by the stimulus of activity. This phenomenon, however, is only manifested in the early stages of treatment. After the lapse of several days as a rule this sensation of fatigue diminishes and the patient feels the beneficial effects of repose.

Briefly, the neurasthenic should rest in bed ten, eleven, or twelve hours daily without allowing himself to be influenced by scruples nor by sensations apparently paradoxical.

But this is not all. It is, moreover, absolutely necessary that he should rest in a recumbent position after each meal. In the first place, this practice is indicated in order to favour the work

of digestion, which is habitually difficult in the case of dyspeptics. It has the advantage of neutralising the downward traction of the weight of food in the dilated stomach, the musculature of which is enfeebled. In addition, however, it avoids the simultaneous double expenditure of nervous energy in the work of digestion and of muscular activity. It must indeed be remembered that the work of digestion calls for an expenditure of energy, which the exhausted nervous system of the neurasthenic has considerable difficulty in meeting. If there is added to this the expenditure, however small it may be, of simultaneous muscular or intellectual energy, the nervous resources do not suffice ; there is wastage, over-exertion, and finally deficit. It is therefore absolutely necessary that the patient should rest after each meal for as long as possible, an hour at least. This rest should be taken, not in a sitting posture on an arm-chair or couch, but in a frankly recumbent posture, on a bed or deck-chair. It is only in this position that one obtains the total muscular relaxation, the complete slackening which we seek.

As a result, far from applying to the neurasthenic the old adage, " One should digest with one's legs," he should be persuaded of the contrary and, by means of complete rest, be permitted to digest with his stomach, which is for him an amply

sufficient labour. How many such patients have I not seen who had been advised to take a little "constitutional" after each meal and who the more they walked the less they digested? Therefore, let there be no work after meals, but recumbent rest for at least one hour.

Should the patient sleep during this siesta? I do not advise it as a rule. The majority of people who are not accustomed to diurnal sleep experience on waking a sensation of malaise, which endures throughout the rest of the day. Moreover, sleep taken in this manner carries with it the risk of compromising the soundness or duration of the nocturnal sleep. It is therefore preferable not to sleep. Only those who know, through personal experience, that this sleep will not inconvenience them and will not hinder them from sleeping at night, may doze. The rest should fight against somnolence by talking, reading, smoking, etc.

This siesta, taken after lunch, has, moreover, the merit of dividing the day by a rest in which, as it were, the patient takes breath for his daily effort. And, indeed, he feels infinitely better on rising, as though the repose had given him back a considerable amount of strength. Not only the physical condition, the sensation of fatigue, benefit, but also the entire mental state; the patient is less gloomy, less anxious, more energetic,

and more confident. He works better also, so that the time lost is largely compensated for by the improved quality of the work accomplished.

I complete this fight against fatigue through rest by the method of economy of effort. It consists in avoiding all useless expenditure of effort, all superfluous work, all wastage of force. In the lives of every one of us there is a certain number of acts which are imposed upon us in an unavoidable manner by the necessities of our profession or the exigencies of social life. There are, in addition, certain other acts which are not absolutely necessary, which could be avoided, which correspond to no practical exigencies, which represent superfluous activity.

These superfluous acts are to be suppressed in the case of neurasthenics.

Thus I prohibit all avoidable walking. I always say to them, " If you have to get somewhere, take a vehicle, do not walk." In the same way I advise them never to stand unnecessarily, but to take a seat whenever occasion permits.

Guided by the same principle, one cannot too strictly prohibit all the distractions so often advised to neurasthenics. Numbers have been aggravated by dinners, soirées, theatres, voyages, recommended on the pretext of distracting them and which have no other effect than to exhaust them still further.

All uncalled-for fatigue, also, we must eliminate. No reading appealing to the emotions, no games. "When you are not obliged to work to some purpose, do nothing at all," is what I tell my patients. Still less are dinners, sport, and the theatre to be encouraged. As regards travelling, I consider it barbarous to subject these unfortunates to the fatigues incidental to change of locality whilst their nervous energy is barely adequate for the performance of their simple organic functions.

Walking is permitted, but under conditions. It must be done in the open air, without hurry, at a slow pace. Moreover—and this is an important proviso—the walk must be interrupted at the first sign of fatigue. It must be remembered that all work undertaken without fatigue is salutary and develops the functioning organs, that all work accomplished with fatigue, in spite of it, fighting against it, is harmful, exhausts the organ which is acting and leads to overstrain.

I am also often interrogated by patients upon the question of sexual relations. Should these be indulged in or abstained from? As a general rule neurasthenics have little sexual appetite, some even have none at all. To some this is a source of worry, others pay little heed. Having first reassured them concerning this frigidity, which is only the consequence of the depression

and which will disappear with it, I say to them, "Have moderate sexual relations if you feel the desire once or even twice a week."

Tonic Medication.—After rest comes neurotonic medication; having diminished expenses, increase receipts.

But one must have a clear understanding upon the method of action of this tonic medication. It is not here a question of seeking to introduce into the organism energy of extrinsic origin which is to replace the flagging energy of the nervous system. Such pretence seems to me equally illogical and unrealisable. All attempts made on these lines have failed entirely; none of the injections of phosphates, lecithins, or nervous substances have fulfilled their purpose. The same may be said of attempts to fortify the brain and cord by means of the passage of electric currents.

Why these set-backs? The fact is that the nervous cell, which is a living organism, only draws its energy by absorbing nutriment from the medium which surrounds it and by suitably assimilating it. Now it is not only poverty of the enveloping medium, in this case the blood, which creates neurasthenia; this is true only of the conditions of advanced malnutrition, anæmia, physiological poverty, where the hæmatic state is really inadequate. It is rather insufficient assimilation

on the part of the nervous matter of the nutritive elements bathing it. In the depressive state cellular activity is diminished, not only as regards its functions of conduction, of nervous concentration, but also as far as its actual functions of nutrition are concerned. Exhausted by weakness or clogged by intoxication, the neurone does not sufficiently absorb from the surrounding plasma the nutrition of which it has need. It thus finds itself placed in a veritable vicious circle; in the first place it is enfeebled, and then, by means of this very enfeeblement, it is unable to regain its strength.

Tonic treatment, therefore, is not going to consist in stuffing the patient with so-called neurophile substances, such as the phosphates, lecithin, and nervous extracts; however much nutrition is offered to the cell, it is unable to assimilate it. Doubtless it is necessary, as we have seen, to furnish the organism with nervous aliments when examination of the patient demonstrates their insufficiency; in the chapter upon treatment of predisposing causes we have considered this eventuality. But this being done, the assimilation of the cell must in addition, and above all, be stimulated in order that it may profit by what is offered it.

This is, in my opinion, the real aim of neurotonic medication, and these considerations in-

dicate precisely the lines along which we ought to seek in order to realise it.

Numerous neurotonic medicaments come before us; I have experimented with nearly all of them, and I shall discuss them in accordance with the results I have personally obtained.

The best of them all has without doubt appeared to me to be *strychnine*. This seems to me really to bring about the desired activity of the nervous cell, to produce that increase of assimilation and nutrition of which we stand in need. Only, it must be properly employed. It is upon this mode of employment that I wish to insist here.

Two conditions are necessary in order to obtain the maximum therapeutic effect:

1. It should be employed in large doses;

2. In progressive doses.

1. If in the hands of many practitioners strychnine has not fulfilled expectations, it is because it is commonly employed in unduly small doses. The doses usually prescribed of $\frac{1}{30}$ to $\frac{1}{15}$ gr. a day are quite inadequate. It should be realised that strychnine is an entirely inoffensive substance if the toxic dose is not overstepped, and is devoid of any kind of inconvenience. It interferes with no organ in its passage through the system, it is completely and rapidly eliminated, and it produces, whatever the classical works may say, no phenomena of accumulation. There

is, therefore, no sort of reason for handling it with fear, and it should be boldly given in as full doses as possible, in maximal amounts for each individual.

What is the criterion of such maximal doses? It is the physiological reaction of the nervous system. When increasing amounts of strychnine have been given, as *e.g.* by daily augmenting the dose, the smaller qauntities produce no phenomena. It is only on reaching a certain dose that the patient perceives any abnormal impressions. These are: a certain state of intoxication in no way disagreeable, a little vertigo, stiffness of the jaws, stiffness of the legs interfering with the gait. These slight disorders last twenty minutes or half an hour, then disappear, and the patient subsequently experiences a pronounced feeling of well-being.

I consider, therefore, that one can, and ought to, go fearlessly up to that physiological reaction; it is under these conditions that one will obtain the maximum effect with the drug.

2. Once, however, having arrived at the dose which produces the physiological reaction, one must not stop there. It is necessary to continue to give the drug in increasing doses.

I have established the fact that there is produced very rapidly a tolerance to the drug. For instance, a dose injected into a man followed by

the effect I have just described no longer produces any on the third day. Consequently, in order to obtain an analogous result, it is necessary progressively to augment the doses.

Having established these theoretical principles, I will describe my usual technique. The salt to which I accord preference is the sulphate of strychnine. I prefer hypodermic injections to oral administration ; they possess several advantages—exact and certain dosage of the drug, close supervision of the patient, possibility of suggestion in neuropaths at each interview.

I therefore have prepared for me a 1 per cent solution of sulphate of strychnine, carefully sterilised. At that strength the ordinary Pravaz syringe contains 1 centigramme of the drug, and each of the twenty divisions, corresponding to one drop, represents a half milligramme. One can also have prepared ampoules of one cubic centimetre from which to draw.

I commence by injecting the first time 3 milligrammes ($\frac{1}{20}$ gr.), or six divisions of the barrel, in women, and 4 milligrammes ($\frac{1}{15}$ gr.), or eight divisions, in men. To this dose there is so far no reaction. The next day I increase the dose of the injection by a half milligramme, *i.e.* one division of the piston, the third day yet another division of the barrel, and so on, until a reaction manifests itself.

This dose, moreover, varies in a patient who is a stranger to the drug according to his weight and build. For a normal man of about 160 lbs. it is approximately 7 milligrammes of strychnine sulphate by hypodermic injection, 8 milligrammes by the mouth. For a woman of 140 lbs. it is about 6 milligrammes hypodermically and 7 milligrammes by the mouth. When the weight increases the maximal doses increase proportionately. To subjects weighing close on 200 lbs. I have been able to inject from the start, without any sort of reaction, a dose of 8 and even 10 milligrammes ($\frac{1}{8}$-$\frac{3}{20}$ gr.).

One can, moreover, suppress the slight inconveniences of the reaction, vertigo, difficulty in walking, etc., by keeping the patient seated or lying down for half an hour following the injection. Thus he does not even perceive the phenomena occurring in him.

Once this reaction has been obtained one ought not to stop there. On account of the rapid tolerance one can once more increase the doses.

Generally speaking, I have established the fact that the daily tolerance is equal to about half a milligramme of the drug per dose, *i.e.* that one may increase the latter by a half milligramme daily.

Nevertheless, there comes a time when a stronger reaction sets in. The increase is then

stopped, to be resumed at the end of several days when the organism is habituated. Proceeding thus I have been able to attain the dose of 2 centigrammes ($\frac{3}{10}$ gr.) per injection.

One must realise, too, that strychnine, as I have ascertained, is eliminated with extreme rapidity. At the end of a few hours after administration the drug is already gone. It is thus possible at the end of six hours to administer a fresh dose equal to the first without any accumulation of the drug, without any more noticeable phenomena. Thus, in serious cases, one can administer two, three, or four doses of strychnine in the twenty-four hours.

By means of this system of maximal doses repeated several times a day and progressively increased, I have been able to administer to patients the seemingly enormous doses of 5 or 6 centigrammes ($\frac{8}{10}$-$\frac{9}{10}$ gr.) daily without any inconvenience.

Moreover, a corollary of great importance, in spite of these enormous quantities no artificial craving for the drug is produced. It can be omitted, from one day to the next, without any malaise, without any depression. The patient remains, after suppression, in exactly the same state as during the treatment, without suffering from it in any way. I have never observed a case of strychnomania.

If, for any reason, the use of injections is impossible, one must then have recourse to administration by the mouth.

The same solution may be employed in this case, one drop corresponding to a half milligramme. One begins with ten drops at a time in men, eight drops in women, and increase one drop a day, whatever the number of administrations, which may be once, twice, or three times a day, as in the case of the injections. The rest of the treatment is upon the same lines as for the injections. These drops, in spite of their bitterness, are well taken in a little sweetened water.

If, however, patients are unable in the course of the day to obtain the necessary glass of sweetened water and count their drops, it is equally possible to administer the drug in the form of granules. These should be of a strength of half a milligramme, thus corresponding to divisions of the syringe or drops, and their progressive administration is subject to the same rules.

Sometimes I adopt a mixed method, giving *e.g.* one dose by injection and letting the other doses be taken during the day as drops or granules. This avoids several disturbances of the patient daily, and one nevertheless comes into daily contact with him, watching him at close range, and if need be making suitable suggestions.

To put it categorically, I consider strychnine the indispensable drug for asthenia; it is for depression what morphia is for pain. Strychnine thus administered is in general admirably tolerated by the patient, although there are isolated cases in which it appears to produce phenomena of excitement. It is then preferable to abstain from it and administer other less active tonics.

The *phosphate of codeine*, little known medicinally as yet, is likewise an excellent neurotonic. Administered subcutaneously it produces a sensation of euphoria much appreciated by patients. It is particularly indicated in the case of those who are apprehensive and depressed.

Like sulphate of strychnine it must be employed in large and progressively increasing doses. One should begin with 2 centigrammes ($\frac{1}{3}$ gr.) per injection or dose, increasing rapidly to 5 or 6 centigrammes ($\frac{4}{5}$-1 gr.).

Frequently I associate the two salts in a mixed prescription—solution of strychnine sulphate, 1 per cent, and of phosphate of codeine, 5 per cent, following the rules laid down above.

Much less energetic and rapid in its action is *cacodylate of soda*. It should be reserved for the rare cases of patients in whom strychnine produces excitement.

Kola, *coca*, *caffeine*, frequently prescribed for neurasthenics, appear to me to be much more

excitants than tonics in the strict sense of the word. They give a fillip to the nervous system, producing a temporary squandering of strength, after which the patient slips back into a deeper depression.

These substances, too, should in my opinion only be employed in subjects who manifest a natural tendency towards rapid cure, as, for instance, in cases of post-influenzal neurasthenia.

With greater reason the numerous tonic wines should be prohibited, as they unite to the unsuitableness of the kola which they contain that of their alcoholic excipient.

The *formates* do not appear to have realised the hopes which had been formed of them. Many patients, attracted by the claims made for them in the newspapers, had before consulting me taken elixirs of formic acid without having derived any benefit.

I have not yet had sufficient experience of *nucleinate of soda*, recently extolled, to enable me to advise upon it.

As to other remedies, glycero-phosphates, lecithin, etc., they have never appeared to me to have any selective action upon the nervous system as has, for instance, strychnine. They act by building up the general condition, and should be employed to this end, as I have said before, more particularly in organic debility.

But whatever substances be used, it must always be realised and remembered that they are nothing but simple stimulants of nervous activity, of cellular nutrition, and that in reality they bring no fresh energy to the organism. They assist the latter in its natural reaction towards cure ; they set forces at liberty, but do not create any.

All curative energy, if I may so phrase it, must therefore be derived from some other source. It is derived on the one hand from judicious feeding and super-alimentation ; it is derived on the other hand from economy of effort, from suppression of all superfluous expenditure, which enables the available energy to be devoted to the restoration of the exhausted nerve-cell. That is why rest and dietetic régime must be the accompaniments of all tonic medication. Too many therapeutists have forgotten this, and hence have occurred frequent mortifications.

It is, however, necessary that the organism and the nervous system of the patient should be able to substantiate this reaction towards cure. Happily this is the case with the ordinary neurasthenics, but there are some in whom this power appears to be lacking. These are either such profoundly debilitated subjects that their organism has lost all elasticity, or constitutional neurasthenics, chronic or intermittent, who appear

absolutely refractory to all stimulation. There appears to be in them a veritable paralysis of nervous reaction. The most heroic doses of drugs produce no response. Therein lies, as we shall see farther on, one of the causes of the incurability of certain patients.

CHAPTER IX

TREATMENT OF THE MENTAL STATE: PSYCHOTHERAPY

THE neurasthenic possesses a peculiar mental condition. This is indeed no more than an individual instance of a much more general law, in accordance with which we may say that every patient possesses his own particular mental state. Indeed, from the fact alone that he is ill, that he is the subject of unusual sensations, that he suffers, that he is confined to his room or that he is curtailed in his activity, that he is following a course of treatment, that he is awaiting cure, that he is anxious about his health, every individual creates for himself an abnormal mentality which accompanies the affection of which he is a victim.

Now that which exists in a non-neuropathic patient will be more than ever produced in the neurasthenic. Impressionable, anxious, frequently misunderstood by his surroundings, the latter takes up a very special psychic attitude, the elements of which we shall analyse.

What do we find in the mind of the neurasthenic ?

In the first place, a certain number of *abnormal sensations*, simply troublesome or quite painful, which originate in his body : fatigue, muscular paresis, headache, rachialgia, palpitations, cramps, spasms, etc.

Also a peculiar *affective state*, comprising melancholy, boredom, anxiety.

Further, a disagreeable consciousness of *difficulty in intellectual work*, diminution in the power of attention, of memory.

Finally, diminution of will-power.

All these symptoms are only expressions in consciousness of weakening of the nervous centres : they are therefore the primary elements of the neurasthenic mentality.

But this is not all. The patient who experiences these sensations naturally studies them in his inner consciousness, interprets them, reasons about them, deduces the results, extracts conclusions. From this labour of reasoning and interpretation new elements will arise in the neurasthenic mentality, elements which will be secondary.

Some are the offspring of *apprehension*, and take the form of fear. These neurasthenic fears are manifold.

Treated as a rule in their family and social

circle with some sarcasm, misunderstood and ridiculed, labelled as *malades imaginaires*, they fear that no one will ever understand what they suffer, that the physician will not discover the ailment by which they are attacked. That is why they indulge in such prolix descriptions, written on scraps of paper.

They fear also that this mysterious disease of which they are victims and which causes them to suffer without there being anything apparent, that this disease so little known, will remain incurable, and that they will thus be condemned for ever to bear the burden of it.

Some fear that it may only be the beginning of a serious disease, ataxia, paralysis, " softening of the brain," madness.

Fear of losing their wits is present in many patients ; it is one of the most profound, most essential fears, and haunts them with a peculiar intensity. Nevertheless, it is the one that they confess last of all; as the most secret preoccupation of their souls, it is of it that they speak in the final minutes of their interview. I have, across the door of my consulting-room, a screen, intended to hide the apartment when the door is opened. It is frequently behind this screen that in many cases the patient confesses his supreme fear. Whilst I am gently urging him towards the door, having nothing useful left to say or to hear, he

stops suddenly behind this screen, in a rather dark corner, and asks with anguish in his voice, "Doctor, am I going mad?" This is the supreme cry of the apprehensive neurasthenic.

Having read accounts in the newspapers of the suicide of many neurasthenics, they fear being also driven to killing themselves. Let it be noted that at bottom, although finding life amiss, the neurasthenic has no impulse towards suicide. He dreams of death in a contemplative fashion, but without ever providing for or arranging its accomplishment. Herein he is fundamentally to be distinguished from the melancholic, who prepares for his suicide and carries it out.

They fear, indeed, all the consequences of their illness from the social point of view, for themselves and their family—the necessity of giving up their business or profession, the grief of a wife, discredit thrown upon themselves, etc.

At the same time as the fears, *auto-suggestions* also complicate the mental state.

I am not only speaking here of the tendency which they have towards exaggerating their symptoms in the presence of the physician in order that the latter may care for them with greater attention and sympathy, but also of the amplification with which they regard these in their own minds. Imagination increases their pains, their anxieties, but above all their incapacities. Many feel

much more ill than they really are, believe themselves much more incapable of work and of effort than is actually the case. One can readily demonstrate this conviction of incapacity by the test of the dynamometer. Frequently, when I put this instrument into their hands they say, "I am so weak I can hardly squeeze it." But by stimulating them by voice and gesture, I succeed, to their great astonishment, in making them attain a respectable figure, approximating to the normal.

There is gradually organised in this case a complete set of practices and *habits*, such as economy of effort, pessimistic interpretation of events, misanthropy, shyness, disappointment, scepticism, etc., which constitute the supreme intellectual efflorescence of their nervous enfeeblement.

Of these elements of the neurasthenic mental state, the primary ones, which are only the translation into consciousness of the nervous depression, may be removed from the general treatment of asthenia; they diminish and are cured coincidentally with the latter.

The secondary symptoms, on the other hand, which are added psychic products, demand direct treatment; such treatment constitutes psychotherapy.

I have already discussed the precise rôle of

psychotherapy in the case of neurasthenics, and what we have a right to expect from it. I have likewise demonstrated how we ought to utilise it to combat the causative emotions of depression, how it ought to accompany every therapeutic measure in order to vitalise it.

I shall therefore confine myself here to indicating how we ought to make use of it against these psychic consequences.

The moral action of the physician, in this respect, may be summed up in a few words: to reassure the patient concerning his fears, to restore his self-confidence, to encourage his will, his energy, his patience, to lead him, little by little, back to a normal life.

Explain to him, therefore, frankly the nature of neurasthenia, show him that, if distressing, it is at least not dangerous. To those who are afraid of its mysteries I read out passages from my books and articles, and thus greater familiarity with the affection from which they suffer serves to reassure them. All my works are written with the intention of not scaring patients, and they always declare that their reading has done them the greatest good. When they are taught that they are the subjects of chronic fatigue, that fatigue is a normal phenomenon which disappears with repose, they lend themselves much more readily to all the prescriptions of the cure.

Be a convinced advocate for the curability of the disease. To this end I do not content myself with affirmations, but cite proofs. I bring before my patient my case-books and notes (respecting of course all professional secrets), I demonstrate to him by examples that patients much more severely attacked than himself have been cured.

To those who have a dread of some spinal affection, I demonstrate by examination of the patellar reflexes *de visu* that the cord is unaffected. I make them stand up on one foot with the eyes closed, and point out the importance of this test. I make them walk, assume various attitudes, in order to convince them of the absence of all paralysis.

Lastly, to those who fear insanity, I answer with a smile in this dogmatic phrase, "So long as one fears insanity one is not insane. The really mad are those who do not know they are." This reassures them.

The imaginative element, too, must be combated; come down to hard facts; without casting doubt upon the reality of the sufferings, prophesy their rapid amelioration under treatment; affirm also the speedy re-establishment of energy. In order to convince patients, I make free use of the dynamometrical test, which proves to them by indisputable figures that their strength is not lost;

I measure the muscular tone, demonstrating to them that their muscles still possess plenty of elasticity.

Encourage and build up their will-power. Exhort them to overcome their nervous impressions, not to give way before an apprehension, to control themselves in order to control others. If need be, prescribe them practical exercises in will-power to train this function.

In short, make them emerge from this rampart of habits and precautions behind which they are entrenched, from this atmosphere of invalidism in which they are enveloped, to enter once more into daily life, to live like others, to accept like every one else the disappointments, the vexations, the cares, the difficulties which are the current coin of our existence.

And above all try to sustain in your invalids the necessary patience to persevere in their endeavour. The majority are impatient, impelled by an intense haste to get well. At the end of a few days of treatment, finding that their progress is not sufficiently rapid, they complain and give up. Tell them that medicine does not perform instantaneous miracles, that all treatment, in order to effect a cure, needs time to operate, that time is an indispensable factor in all human affairs. At every visit make them demonstrate, make them trace out the progress made, and thus

support at once their patience, their hope, and their courage.

One can see that psychotherapy is far from being a negligible quantity with the neurasthenic. It is only an adjuvant, but a necessary one; viewed from this point it deserves to play its part in the therapeutics of the neurosis.

All this moral treatment must be carried out lightly, with delicacy, with dexterity. It is not at all necessary to assume a pontifical demeanour, to give oneself the airs of an augur, to make the patient sit down opposite to one as though before an examining magistrate. Whilst carrying out my habitual treatment, I talk to the patient, I incidentally employ suitable phrases without dwelling too emphatically upon them. Only occasionally do I adopt a more serious tone, to emphasise a more categorical statement. Nevertheless, when I undertake the re-education of the patient, I make him march and work under strict discipline, without this resembling military exercises.

This treatment I continue whenever I can, not only in my consulting-room but out of it, under all circumstances. Many of my patients have become my friends, and I therefore profit by the moments of relaxation which we pass together to pursue my psychotherapeutic task. In relation to every occurrence, in chance con-

versations, I let pass no occasion to reassure my patient, to point out to him the foolishness of his fears, to prove to him that he has just been energetic, to win him over to the flexible and comfortable philosophy of *armed resignation.*

CHAPTER X

SPECIAL TREATMENT OF CERTAIN SYMPTOMS

THE general treatment which we have just set forth, whilst dispelling the primary asthenia and its causes, ought at the same time, at least in theory, likewise to dispel all the symptoms, seeing that these are but the clinical expression in the various functional domains of that asthenia. If this result frequently comes about, it is not so always with ordinary neurasthenics. Sometimes, despite the general improvement and lessened depression, one or more of the symptoms may persist and the patient long complain of them.

These are, notably, nervous irritability, a state of restlessness, palpitations, headache, vertigo, rachialgia, insomnia, impotence. Each of these obstinate symptoms therefore demands individual treatment which we shall describe.

Irritability.—This nervous irritability is at once somatic and psychic. The patient experiences a kind of internal trepidation ; he cannot remain in one place, fidgets, is restless without

cause. He suffers from sensory hyperæsthesia, starts at every unexpected noise, dislikes strong light. Occasionally he has sudden spasms and muscular cramps.

Psychically, he is impatient, irascible, of a tempestuous humour, getting angry on the slightest pretext, tolerating no contradiction. His will is unrestrained, impulsive, although indeed he regrets the next moment his tempers and outbursts.

To combat this irritability, I advise in the first place warm hydrotherapy, night and morning, whether in the form of overhead douche or spray, or of a simple sponging, followed by a good rubbing with eau de Cologne.

The sovereign remedy against irritability is bromide of potassium. In mild cases I prescribe a cachet containing 0·5 gramme (7½ grs.) taken at lunch and dinner. If excitement is more marked the dose may be increased to 1 gramme (15 grs.) a time. If the patient is especially upset at night, and if he has insomnia from agitation, the remedy may with advantage be given in one dose at dinner-time.

It may be said that bromide is a depressant which theoretically would appear harmful in a depressive neurosis. This objection is well founded. Thanks, however, to the large quantity of strychnine which I administer in addition, the

depressive effect of the bromide is compensated, becomes negligible, and the patient derives nothing but benefit from it. It is essential, therefore, to prescribe this remedy only when the patient has already been subjected to a cure by strychnine.

Other sedative drugs which, although less active and less practically useful than the bromide, may likewise be of service are belladonna, hyoscine, hyoscyamus, scopolamine. Their action is less profound and less lasting than that of the bromides, and they possess the inconvenience of being very toxic. They will be indicated only in aggravated attacks of agitation, preferably by hypodermic injection in cases where bromide cannot, for whatever reason, be given.

Finally, there is a practice which I recommend in the case of those betraying great irritation, and which I call the exercise of restraint. The patient lies down on a bed or reclining chair in a state of complete muscular relaxation. He is to breathe slowly and deeply without thinking of anything. The sitting lasts ten minutes and may be repeated several times a day. The horizontal position, the muscular relaxation, the rhythmical breathing produce a very marked state of calm. I have the first sittings carried out under my eyes, constituting a sort of re-education of restraint. Then I lay the injunction upon the patient to repeat them whenever he becomes too much unnerved. It

is obvious that the therapeutist should fortify this manœuvre by adding a strong dose of sedative suggestion.

Restlessness.—Every neurasthenic has in him a fund of restlessness which disappears in general with the depression from which it springs.

In certain predisposed persons, however, this restlessness increases to the point of becoming a state of chronic apprehension. This is a feeling of insecurity, of expectation, of menace, to which is added a vague sensation of discomfort, of respiratory difficulty, which is most distressing.

This apprehension is only one of the emotive forms of the irritability previously discussed, and the same remedies are applicable: warm hydrotherapy, bromides, belladonna, deep breathing, and, one may add, more especially opium and its alkaloids. Order 2-6 centigrammes (⅓-1 gr.) of extract of opium. The alkaloid which I prefer is codeine, either by the mouth or by injection, in doses of 2-6 centigrammes (⅓-1 gr.) per diem. It creates a sensation of euphoria and does not possess the disadvantages of morphia. Sahli has lately recommended a total extract of opium sold under the title of Pantopon, either in tablet form or as a solution for injection. It will frequently be advisable to order it when one wishes to leave the patient ignorant of what is being given.

Finally, when dealing with an apprehensive patient it will always be advisable to interrogate him discreetly upon possible irregularities in his sexual life—inordinate desire, coitus interruptus, etc., which frequently, as Freud has pointed out, are at the root of apprehensive conditions; in such cases it will suffice to advise the patient to return to a normal mode of life, whilst explaining the ill-effects of his practices.

Palpitations.—Occasionally patients complain insistently of palpitations, and auscultation confirms that the heart beats violently. Others are seized at intervals by attacks associated with pain, simulating angina pectoris. They then fear that they are suffering from cardiac disease, and in relieving them it is important to convince them that these are purely functional phenomena and thus to reassure them.

The general treatment, and above all the régime and rest, the special indications which are suitable for the irritability—warm hydrotherapy, sedative drugs—have a favourable action upon these palpitations.

To these may be added the application of cold compresses over the region of the heart.

Emotions are particularly to be avoided.

Headache.—The headache of the neurasthenic generally diminishes by itself under the influence of treatment in proportion to the lessening of the

depression, and disappears at the end of a few days.

In certain cases, however, it is so intense, so distressing, that the patient demands relief from it. Or again it may persist, despite general improvement, as a painful sequel. It is then advisable to take measures against it.

The usual remedies act well: antipyrin, pyramidon, aspirin, etc. A prescription much used at present is one combining salipyrin with quinine and caffeine.

Electrotherapy likewise is of service, in the form of the static douche, by means of the brush discharge. It seems as though this discharge upon the head has a directly sedative action on the pain; it is indeed, in my experience, the best means of employing static electricity in these patients. A daily sitting of twenty minutes may be employed.

Under certain circumstances the headache appears to arise, in part at least, from circulatory disturbances, arterial hypo- or hypertension. If arterial hypotension be established by means of the sphygmograph, if the temporal arteries are soft and allow themselves to be excessively dilated by each arterial wave, the indication is to employ chiefly the vasomotor tonics, *i.e.* quinine and caffeine. On the other hand, if hypertension exists, the indication is for the vaso-dilators:

trinitrin, erythrol tetranitrate, guipsine, and above all for general treatment of the intoxication which is responsible for the hypertension.

It may also happen that, in those who are constitutionally migrainous, the neurasthenic state not only aggravates the frequency and intensity of the migraine attacks, but also creates a kind of state of migraine leading to chronicity : a heavy and painful head, arterial pulsation, anxious state, irritable temper, etc.

In such cases I have had occasion to order Indian hemp in continuous doses. I begin with 10 minims of the tincture at bed-time, increasing the dose daily up to 20 minims, this amount being maintained until a cure is effected. It can be continued without inconvenience for weeks or months.

Finally, the existence in neurasthenics may be established of the muscular headache which I have studied previously.[1] This is a special form of pain in the head, either migrainous or neuralgic in type (the two may be associated or may alternate), due to the irritation produced by indurations in the muscles of the neck, the nuchal region, the shoulders, and even the face. These indurations, which arise from a condition of chronic arthritism,

[1] Hartenberg, "La Migraine des arthritiques," *Presse médicale*, 17 janvier 1906. "A propos des céphalées musculaires," *Congrès des aliénistes et neurologistes*, Amiens, 1911. "Les Céphalées musculaires," *Presse médicale*, 1912.

through insufficient nutrition, are frequently exaggerated by the vital lowering of the constitution which neurasthenia produces, and so the habitual headache is made worse. I have recommended in the treatment of this headache repeated galvanisation of all the affected muscles with a strong current. The continuous current eventually makes the muscles supple, softens the indurations, lessens their sensitiveness.

If necessary cannabis indica may also be given here as described above.

Vertigo.—Vertigo as a rule gives way rapidly to strychnine in full doses. If this proves insufficient it may be reinforced by quinine in doses of 7-10 gr. daily.

It should, however, be realised that many of these so-called persistent vertigos of neurasthenics are in reality only apprehensions of vertigo. The patients fear being taken with an attack in the street, and they see themselves already fallen down and laid out on the pavement. When this dread seizes them they experience a keen distress, and the state of mental confusion and obnubilation which accompanies the emotion is mistaken by them for vertigo.

It is important, therefore, to establish, by means of a close interrogation, the exact nature of the impressions to which they are subject. Emphatic and encouraging words will reassure

them as to the nature and harmlessness of the symptoms which have raised their apprehensions.

Rachialgia. — Rachialgia is rarely intense enough to call for direct treatment. Usually it disappears with rest and general treatment.

In some cases, however, I have had to intervene with treatment specially directed towards it.

The muscular crippling which accompanies it gives way readily to strong application of a continuous current. A sitting may take place daily at first, then every other day. Gentle massage acts in a similar manner. Finally, in the case of more acute pain the actual cautery may be employed.

The same treatment may suitably be applied to other painful areas, to the various " algias."

These " algias " frequently arise from interstitial infiltrations, from cellulitis (fibrositis). Either the constant current or massage may be used.

Insomnia.—Insomnia is one of the most difficult symptoms to combat in neuropaths in general and in neurasthenics in particular.

Fortunately the general treatment frequently causes it to disappear coincidently with the other symptoms. It is curious to see how in certain cases strychnine in full doses, which one might think would be exciting and inimical to sleep, greatly facilitates it. As an instance of this, several of

my patients have asked me, when they had to dine out, to be allowed not to take it, as by dessert-time they experienced an irresistible desire to sleep.

However, if the insomnia is obstinate it must be treated directly. To this end one must in the first place clearly understand the actual mechanism of this insomnia.

Firstly, an insomnia of fatigue should be distinguished. This is what normally follows upon excessive work and effort. One knows that when one is very tired, either following a long walk, exhausting exercise, or after intellectual labour, one does not succeed in going to sleep.

Prolonged rest and tonics are here indicated. In severe cases one must not hesitate to condemn patients to remain in bed. Sleep returns as a result of absence of effort. It is prudent also to allow them up very gradually, since the least fatigue interferes with sleep.

If one establishes the presence of actual arterial hypotension one has to deal with the insomnia of hypotension, to which M. Martinet has recently directed attention. Caffeine, digitalis, adonis vernalis are then indicated.

There is also insomnia due to nervous over-excitement. The patient cannot remain quiet and immobile in his bed. He turns over, moves about, cannot fall asleep. Recourse must here

be had to the sedatives, bromide in doses of 7-15 grains taken with dinner.

If arterial hypertension exists, with a state of toxæmia, the patient must be treated with a view to neutralising the toxic condition and vascular depressant given him.

Finally, an insomnia due to anxious preoccupation may be distinguished. The subject, haunted by a care, a worry, thinks of it indefinitely, and his brain, unable to rest, never sleeps. During the night his mind works, ruminates without ceasing upon the subjects which are preoccupying him.

In such cases the restlessness must be quieted by bromide, or better still by opium.

To these diverse prescriptions, it is obvious, will be added those suitable for insomnia in general: a light evening meal, a cool and quiet room (open windows), no reading in bed, hydrotherapy before going to bed, warm sponge or shower, prolonged hot bath.

As a last resort we have the hypnotics. We should have recourse to them only in the last instance, but as it is above all essential that the neurasthenic should sleep, we must be prepared to prescribe them when it is inevitable. Veronal, trional, sulphonal, chloral, paraldehyde, etc.—the list is a long one. Veronal suits pretty nearly all cases. Sometimes it is badly borne, then sulphonal, chloral, or paraldehyde may be ordered.

Impotence.—Many neurasthenics, as we have seen, complain, if not of complete impotence, at least of a notable diminution of their sexual capacity. They only rarely have erections, often inadequate. This sexual depression is in reality only a partial expression of the general nervous prostration. There is usually no necessity to institute any special treatment; the genital weakness improves spontaneously at the same time as the primary asthenia.

Moreover, many neurasthenics, even quasi-impotents, in no way seek restoration of their sexual capacity. As a matter of fact, they do not suffer from its loss. Impotence is only a cause of pain and grief if it interferes with the accomplishment of a desire, if it prevents the possession of a woman ardently coveted. Now the majority of neurasthenics confess that they have little or no desire, that they are indifferent to sexual matters. They have no voluptuous thoughts; women do not attract them. By a sort of instinct they realise that coitus would fatigue them more, or by experience they may know that it increases their depression; far from seeking opportunities they avoid them. Certain neurasthenics even evince a veritable repugnance for the sexual act, which they consider an imprudence. And when, at the solicitation of wife or mistress, they accomplish the act, they experience an actual anger

against the woman who tempted them. Therefore no special therapeutics need be undertaken in these cases.

It is quite different with a second category of patients whom we shall now consider.

It happens frequently that certain individuals, having gone through a period of depression and having had failure of sexual performance, have been badly hit by these "miss-fires." They are affected by them, they become preoccupied, are anxious as to the future. When, therefore, the moment comes to make another attempt, the remembrance of the past failure inevitably returns with dread of a fresh want of success. Their emotion is so strong that it entirely deprives them of their power and they remain in a condition of complete genital mutism in the society of the desired woman.

This is a condition of emotional impotence. It is no longer, strictly speaking, true incapacity, but an inhibitory phenomenon brought about by a psychic mechanism. Nevertheless, as I have frequently observed, there exists underlying this emotive incapacity a certain degree of real organic weakness. Except in patients with a high degree of emotivity, I think that impotence with anxiety only has the effect of exaggerating a more or less marked, but real diminution of sexual capacity. A strong, durable erection in a vigorous indi-

vidual could not be annihilated by an emotion. It is only altered because it is already less energetic.

Hence arise the indications for treatment. The virile capacity must be fortified and simultaneously the emotion combated which arises at the moment of coitus.

This is how I proceed. I begin by talking to the patient. I explain to him that he is affected with a slight diminution of virility which I am about to treat by appropriate methods. "When you have recovered your normal capacity," I add, "no emotion, however powerful, can cause the erection to subside."

To this end I administer a course of daily doses of alternating interrupted current. The positive electrode is placed, well moulded, upon the perineum, the negative electrode upon the loins. By means of a metronome I produce interruptions and reversals of the current which each time provoke a strong muscular contraction. The sitting lasts six minutes.

After this sitting I administer into the substance of the thighs an injection of $\frac{1}{1000}$ milligramme of yohimbine. This substance is, in my experience, the best of the aphrodisiacs. There is no doubt that it considerably favours vigorous erections. It has always appeared to me vastly superior to the classic remedies, phos-

phorus, cantharides, ergotin, and presents no inconvenience, no danger. As regards strychnine, which is usually reckoned an aphrodisiac, I have never satisfied myself, even in the large doses I employ, that it has a specific action on the genital system. It acts admirably on the nervous depression, but not on the apparatus of erection.

I recommend in addition a cold sitz bath for ten minutes night and morning, or else a cold douche in the form of a jet played up and down the spine and upon the perineum.

Recently pneumatic massage of the penis has been recommended. A sort of cupping-glass is applied to the member and produces a relative vacuum which leads to erection. This being effected, a series of compressions and decompressions are made which fulfil the function of pneumatic massage. I have never employed this procedure, but its introducers claim to have obtained good results.

After this physical treatment it remains to combat the emotive element of the patient. It is left to psychotherapy to carry out this task.

If the patient wishes and has confidence in it, I propose hypnotic suggestion, whether the patient does or does not sleep. The important point is that my words should comfort him and give him confidence in himself.

Much more essential, however, is the following

advice which I give him in the waking state. I say to the patient, " Your failure arises from the fact that, in bed with the woman you desire, you will yourself to have an erection. Now an erection cannot be willed. The more you will, the less it comes. It must, on the contrary, come spontaneously, without your thinking of it, outside your will. Now, in order that it should be so produced, you must be prepared to wait for it. Do this then : Sleep with the woman as often as possible. But in so doing have no precise intention, no formal plan, do not say to yourself, ' I must have an erection at all costs.' No—think to yourself, ' I will await the propitious erection ; when it comes, I will profit by it.' And think of it as little as possible ; the less you do so, the more quickly it will come.

" Let the woman more or less into your secret ; do not let your pride stand in the way. Women have much greater indulgence for this kind of mishap than is thought. If necessary, confide in her that she makes you so nervous that you are frozen with emotion. She will be flattered.

" In such a mental attitude await the erection. It will come sooner or later, but it will come. According as your virility returns through my treatment, it will be nearer at hand. If it does not come the first day, do not despair, it will be on the second attempt, perhaps not till the third

or fourth, but I can assure you that it will come."

In fact, in all my observations it has occurred successfully at the end of four or five days at the most. One or two repeated successes will gradually give confidence to the patient and the emotional hypermnesia, the paralysing apprehension will progressively diminish.

A few words in conclusion upon premature ejaculation, which is also sometimes met with in neurasthenics in whom irritability predominates. Here the erection is well produced, but there exists such an irritability of the genital sensory terminals that the least contact with the woman suffices to produce ejaculation before intromission has been accomplished. Sometimes even the patient, being alone and having an erection from an erotic thought, is the victim of spontaneous ejaculation from friction of the clothes or by the simple effect of his imagination.

This is not a case, obviously, of impotence, strictly speaking, but of a special difficulty in the sexual act through insufficient duration of the erection.

Premature ejaculation also demands entirely different treatment from impotence, since one has not here to deal with a weakness of the muscles of erection, but of a hyperæsthesia.

The general treatment is included in that of

irritability, which has already been indicated and of which this is only a manifestation : bromides, hyoscine, scopolamine, warm hydrotherapy, etc.

As regards special treatment, a particular method has been recommended which consists in producing, in order to avoid ejaculation, a nervous distraction. At the moment when the patient feels ejaculation to be imminent, whether before or after intromission, he is to produce in himself a powerful sensory stimulus which shall inhibit this ejaculation. This strong stimulus may be of a variable kind : a strong and disagreeable odour, a prick or pinch. A sort of bracelet has even been designed, studded with points, which the patient tightens at the given moment, or a little portable faradic battery which produces a painful sensation. Generally it suffices that the patient pinches himself strongly or pricks himself with a pin when he feels the ejaculation coming. Some can even inhibit it by thinking of a distressing idea or recollection.

CHAPTER XI

TREATMENT OF COMPLICATIONS

I HAVE said that there is a certain number of disorders which you will meet with in neurasthenics but not integral parts of the disease, which represent, not symptoms, but complications of the depressive neurosis; there are various apprehensive sensations, phobias and obsessions, hypochondriasis, auto-suggestions, the melancholic state.

All these disorders when they accompany depression do not, as a rule, give way to the usual treatment, and demand special therapeutics. I may add that this therapeusis is particularly laborious and delicate, from the very nature of these disorders. We find ourselves here in the presence of inherent predispositions of the organism, of nervous taints, which the neurasthenic condition has awakened or exaggerated. We have, therefore, to do with a constitutional element which has to be combated, and one knows how laborious and often uncertain such

combats are. One must also not be surprised if the rapid and complete cure of such symptoms is frequently impossible, and, in many cases, one should promise and hope only for a relative amelioration, which, indeed, represents a considerable victory gained over the malady.

Phobias and Obsessions.—As all the phobias and obsessions are developed upon a foundation of apprehension, it is advisable in the first instance, whatever form they may take, to allay this anxiety by the means already indicated : bromides, belladonna, opium, warm hydrotherapy, respiratory exercises, etc.

This being done, we may pass on to the individual treatment of each form.

From the specially therapeutic point of view, I have been led to distinguish various types of phobia.

In the first place come the phobias, which originate in a real organic disorder already recognised by the patient, and which he dreads on account of its inconveniences.

Such, for instance, is tremophobia in one afflicted with tremulousness. I have recently been consulted by a man who had an apprehensive phobia of tremor in writing. Investigation showed me, however, that the man, previously alcoholic, had long had a tremor, and it was only the fear of not being able to write at all and of

losing his situation which had given birth to the phobia.

In the same way a neurasthenic troubled with great weakness of the legs, may through his disability, become basophobic. This basophobia, however, is only the consequence of a genuine difficulty in walking.

I have shown also how, underlying the phobia of blushing, there is a vaso-dilatation of the face and scalp and a constitutional cardiac erethism. Ereuthophobia is only fear of the return of waves of blood to the face, which are very easily produced, and have frequently occurred in the past.

In all these forms of phobia, it is essential, in the first instance, to diminish or dispel the genuine affection which is the originating cause of the phobia.

The tremor may be abated with hyoscine; the muscles of the legs may be fortified by electricity, massage, and tonics; the congestive tendency of the face may be subdued by means of cervical galvanisation, as I have already indicated, by quinine or adrenalin; the cardiac erethism may be lessened by bromide or belladonna.[1] Psychotherapy, aiming at reassuring the patient, will do the rest.

[1] Hartenberg, "La Base organique de la rougeur émotive et son traitement," *La Presse médicale*, 25 février 1911. "Un Nouveau Cas d'Éreuthophobie guéri par mon traitement," *Le Médecin practicien*, 20 décembre 1911.

A second type of phobia is represented by the inhibitory phobias. These are all such as prevent the patient from doing something, from touching an object, carrying out some action, going to some particular place.

I have elsewhere indicated the treatment which I employ against these phobias.

After having put the patient into a condition of repose, and having initiated a sedative treatment for the emotivity, removing from him for a week or two the object of his phobia, I suddenly announce to him one day that he is cured, that the emotivity that was the cause of his phobia is removed, and that he is now able to face the contact, the act, the situation which he feared. In order to demonstrate to him the reality of his cure I propose that he should put it to the proof, and under my direction I make him face the situation which he feared. He is apprehensive, trembles, is distressed, but under my encouragement he takes the risk and perseveres until he has overcome his inhibition. I thus accomplish a veritable re-education of his will, and if the latter is even slightly developed in the subject of it, he finishes by triumphing over his phobia.

A third type of phobia, on the contrary, comprises the impulsive phobias, those whose effect is to impose upon the patient an irresistible gesture or act. Such is the phobia of uncleanliness,

which impels the patients to wash all day long. Such is the phobia of an unlucky number, which impels the patient to find this number at every turn. Such, again, is the phobia of baldness, which impelled one of my patients unceasingly to look at himself in the glass. Here the treatment consists in training the will of the patient to resist his impulses. As the motor elements play a principal rôle in the tenacity of a phobia, the more these elements are restrained the more the phobia itself will be lessened. Constraint and suppression of these impulsive acts must therefore be gradually obtained, and thus, by means of progressive exercises, the phobia itself will be lessened.

There is, finally, a fourth class of phobias which are neither inhibitory, impulsive, nor the apprehensive exaggeration of a real affection. Thus one of my patients had a continual fear of becoming insane. Another had a dread of the inclination to kill his wife. A third was apprehensive of committing sacrilege in doubting the sincerity of his confessor.

Against these phobias, purely abstract, if I may so describe them, which give rise to no external reactions which may be combated, therapeutics are particularly powerless. One must have recourse to general treatment and to persuasive arguments which, unfortunately, too often fail to convince the patient.

In general, one may say that the curability of these various phobias varies greatly; according to the subjects, it depends directly upon the predisposition of each to apprehension. Those in whom it has shown itself at every pretext from youth upwards, those who are congenitally apprehensive, are cured with great difficulty, sometimes never. Those, on the contrary, in whom apprehension is occasional, brought about only by depression, may be cured.

Obsessions are, in general, as has been shown by Pitres and Régis,[1] only phobias which are past and have become chronic. They call, therefore, for the same treatment as the latter.

The other apprehensive symptoms, scruples, doubts, various manias, apprehensive tics, are amongst the most difficult things to treat. This is because they rest upon a basis of constitutional predisposition which we are as yet unable to modify.

The treatment consists in soothing the anxiety and in fighting the morbid mental influence by means of psychotherapy, exercises and arguments. But a cure must not be looked for too confidently.

Hypochondriasis.—Of delusional hypochondriasis I will say nothing; it is a mental disease, too often incurable. I would only sound a note of warning against pretended surgical operations

[1] Pitres and Régis, *Les Obsessions et les impulsions.*

meant to make the patient believe that the organ, the foreign body, or the animal from which he has been suffering has been removed. These procedures merely effect a temporary improvement, after which the patient lapses, more discouraged than ever, into his delusions.

We must, on the other hand, be prepared to treat apprehensive hypochondriasis.

At times this is only a phobia or obsession, relative to an organ or function which the patient vainly tries to overcome without being able to get it out of his mind. The treatment of the phobias will be applicable in these cases.

Again we have to combat not, strictly speaking, a phobia, but a preoccupation accompanied by apprehension, with attention concentrated upon the object of this preoccupation. The attention thus focused causes the neurasthenic, already hyperalgesic, to experience abnormal sensations, the well-grounded nature of which he does not doubt and which are to him a veritable nightmare. The following are some examples.

One of my patients struck one day by the muscae volitantes before his eyes, thereafter fixed his attention upon them until they assumed immense proportions. I caused him to be examined by an ophthalmologist who found nothing abnormal. The apprehensive attention, fixed upon these muscae volitantes, the presence of

which we habitually neglect, sufficed to convert them into an object of continual annoyance.

A second, preoccupied by the rumblings which he hears in his belly, fixes his anxious attention upon them, and henceforth spends his time following the passage of gases along his intestines, which he pretends to be perfectly able to trace.

A third complains of violent palpitations. Upon auscultation the cardiac sounds are perfectly normal. On interrogation I find that this man fears heart disease and concentrates his apprehensive attention upon this organ, until he ends by being continually aware of it, whereas under ordinary conditions the sensation passes unnoticed.

These hypochondriacal symptoms due to apprehensive attention fixed upon a function or an organ demand, in the first place, the general treatment of anxiousness. In the second, psychotherapy will be called to its aid. But this pyschotherapy must in this case be inspired by peculiarly adroit diplomacy. In particular, the mistake must be avoided of trying to treat the symptoms directly. For, the more one applies immediate or local treatment to them the more one fixes the patient's attention upon his symptom, thus actually going counter to the end aimed at. The attention should, on the contrary, be distracted, the mind otherwise occupied, symptoms

neglected, and no apparent importance attached to them ; briefly, the most rational treatment here appears to be affected indifference.

Auto-suggestion.—The treatment of auto-suggestions in the neurasthenic does not differ from that of auto-suggestions in general. It arises entirely from psychotherapy. Disorder arising from auto-suggestion is treated by suggestion.

Doubtless it will be advisable, if the patient manifests a very marked degree of unrest, leading to auto-suggestion, to allay this unrest by the physical means already indicated : warm hydrotherapy, bromide, opium, belladonna, respiratory exercises. It is, however, mainly psychic treatment which is to be relied upon.

On the one hand, with reassuring words and convincing arguments, the apprehensions of the patient are to be set at rest. On the other hand, by means of suggestion, whether waking or hypnotic, whether direct or indirect, by means of pseudo-remedies, pseudo-electricity, pseudo-massage, etc., one promises the patient the disappearance of his symptoms, and complete and definite cure. One ends by bringing the amelioration to his notice by means of exercises, walks, etc., and making him admit himself the reality of his cure.

Melancholia.—When one finds oneself face to face with one of those mixed conditions where

simple nervous depression is accompanied by sadness and moral pain disproportionate to the circumstances of the patient and justifying the term of melancholia, the classical treatment of the melancholic state must be instituted. Laudanum should be administered in progressively increasing and diminishing doses, beginning with 50 minims a day and increasing to 200, 5 drops being added daily. Having reached the maximal dose, the amount is decreased to 50, once more to be increased. Injections of codeine phosphate in increasing doses up to 12 centigrammes (2 grs. nearly) a day will likewise benefit the patient. It is advisable also to watch very attentively the general condition, which is often altered, and to supervise the diet, sleep, and the intestinal functions.

Finally and above all, strict supervision of the patient is necessary, always bearing in mind that the melancholic has ideas of suicide and frequently carries them out. If this supervision, as much moral as physical, is not possible in the family, urge strongly that the patient be placed in a special establishment or even under restraint.

CHAPTER XII

PROPHYLAXIS: PREVENTIVE HYGIENE

It is not to be expected of man that he should take care of himself in advance in order to avoid a malady that he knows nothing of. Our fellow-creatures consult the physician and submit to treatment for two reasons only: the desire to avoid suffering, and the fear of death. These two causes being absent, if he is not suffering pain and neither feels nor believes his life to be in danger, the ordinary man will never think of having recourse to medicine, and will even, from the point of view of the healthy man, ply the doctors with sarcasm, jeers which have been the same in their empty folly from the earliest times doubtless so long as doctors have existed. That is why I repeat that the most dangerous complaints are those that give rise to no pain. The patient, suffering no inconvenience, pays no attention to them. Such, for instance, are albuminuria and diabetes. More than any others these demand a severe hygiene, continued depriva-

tions, and lasting caution. Now these are the diseases of which patients, as a rule, take the least heed. They are not suffering in any way, hence all our régimes appear to them the imaginings of pessimists. Being frequently drawn towards good living, towards old wines and young women, they use and abuse them, laughing at our prohibitions, saying in their inner consciousness, "When I can no longer enjoy these it will be time to stop." I have thus knowledge of numerous diabetics, sufferers from Bright's disease, incipient heart complaints, etc., patients who are killing themselves slowly and as though wilfully. Then when the acute symptoms develop it will be too late; we shall be powerless when they are called upon to pay their debt to Nature, although it will be the same people, deaf for years to our sage advice, who will loudly proclaim the fallibility of science and the ignorance of physicians.

All these considerations also are applicable to neurasthenics. It will be in vain that you point out to them stigmata of weakness, of tendency to nervous fatigue; it will be in vain that you counsel caution, put them on their guard against the attack of neurasthenia which threatens them; they will turn a deaf ear. Like the others, they will only begin to take care of themselves when they are really ill.

There is, then, in reality, no prophylaxis of

neurasthenia ; one does not, in practice, have the opportunity of preventing an individual becoming neurasthenic who has never been so. It is only after a first, a second, or a third attack that the patient, familiar now by experience with the drawbacks of the disorder, takes precautions to avoid it in the future It is here only that the preventive medicine of neurasthenia begins.

Here, then, is your patient who has just passed through a neurasthenic crisis, much improved, more or less come out of his depression, more or less cured. He will enquire as to the means whereby he may avoid a relapse, or, if he does not ask you, to satisfy your conscience and do your duty, you will tell him.

The majority of prophylactic measures will in some be only an epitome of the therapeutic conduct which we have advised in regard to predisposing and exciting causes. For, even when the patient is cured, these will always remain, more or less latent, ready to become active and precipitate a fresh attack. It is imperative, therefore, that the patient should in a general way so organise his life as to avoid depressive conditions.

To begin with, he should be as much as possible in the open air. In this respect the habit, which is growing more and more among all classes, of paying an annual visit to the country is an

eminently healthy one, and often wards off an attack for the rest of the year. In autumn, after the holidays, there are always fewer neurasthenics than in spring.

It is obvious that a country life would be preferable for all predisposed subjects. Also if the patient could change his residence and carry on his work in the country, this would be better than living in a dusty and smoky town.

The patient would be well advised to take stock of the exact limits of his strength. Make him understand that he must restrict his work, always stop when he begins to feel tired, and in every way practise economy of effort. His hours of rest must be long ; he must go to bed early and get up late. He must take a siesta after his meals, particularly after lunch, in order to divide the day by an hour of immobility and restraint. He must, in a word, be resigned to moderate himself, to take his own measure, knowing that his organism is only capable of a lessened activity.

Against the predisposition dependent upon general debility the means which I have indicated may be made use of : super-alimentation, massage, general tonics, iron, arsenic, opotherapy, etc. The patient will do well to submit to these measures from time to time.

Against arthritism special diet, dry heat,

purgatives, days of fasting, should be continued regularly. An annual cure at Vichy, Vittel, Contrexéville, Aix-les-Bains, etc., will assist to combat the interference with nutrition.

The exciting causes also demand permanent precautions.

The tuberculous, the syphilitic, the malarial subject will seek treatment of their respective diseases for more imperative reasons than that of nervous debility.

The neurasthenia of adolescence will be treated by the methods I have indicated up to the end of development.

That of the menopause will be treated by ovarian extract until the cessation of the symptoms of the change of life.

That of senile decay will call from the physician for all the counsels of moderation suitable to the case.

But, above all, alimentary hygiene must be considered.

He who for the first time has succumbed to an attack of neurasthenia which can be laid to the blame of his digestive tract must, however much it may cost him, constrain himself to follow without deviation the régime which I have laid down against gastric or intestinal dyspepsia. He should also take careful precautions against constipation.

Finally, the patient should endeavour to avoid all depressing emotions, and should arrange a calm, simple, regulated existence. He should not embark upon complex business, speculative projects, the cares and shocks of which might wear out his nervous system and reduce him to a condition of incapacity to carry out his intentions. He might do so at the price of his physical and moral health.

As to the symptoms and complications which survive the neurasthenic condition, they are to be treated by appropriate means until they are cured.

Thanks to all these precautions, to this wise mode of life, the patient predisposed to neurasthenia will have a good chance of not relapsing. But how often are these counsels of prudence followed ?

CHAPTER XIII

THE DEGREE OF CURABILITY OF A NEURASTHENIC: RESULTS OBTAINED BY TREATMENT

We shall study simultaneously the degree of curability of the neurasthenic and the results obtained by treatment. In reality they hang closely together, the latter being the confirmation and living controls of the former.

Let us first consider the **degree of curability** of a neurasthenic. The analysis which we have made of the pathogenesis will render the task an easy one. It is at once apparent that the degree will depend upon two factors: the exciting causes, and the predisposition of the patient.

Other things being equal, a neurasthenia will be the more difficult, the more laborious, to cure in proportion to the severity, the duration, the tenacity of its exciting causes. And we see at once the great differences which exist in this respect amongst the various causes.

Some are deep-lying, incurable, such as all the chronic affections which slowly exhaust the

organism and lead to death: cancer, tubercle, diabetes, Bright's disease, Addison's disease, etc. In all these cases the incurability of the neurasthenic condition, linked as it is with the fatal prognosis of the underlying disease, is obviously absolute. No one would have the presumption to pretend to cure an exhaustion of this nature.

But, whilst recognising the fact that such a patient cannot be cured, I must also state that I have many times succeeded in effecting a sensible amelioration. In many diabetic and tuberculous neurasthenics I have obtained a return of strength, of vigour, of energy, which have for a moment aroused a hope of cure. Undoubtedly this did not come, but I think that even in these desperate cases therapeutics can and should intervene by virtue of the often considerable improvement which it can effect.

Then come causes which, without being theoretically incurable, oppose to our efforts a resistance frequently astounding. Such are certain digestive disorders, certain gastric dyspepsias, certain intestinal affections which despite the most severe and scientific dietaries persist hopelessly. You have improved your patient, you think him on the road to a cure, as much visceral as nervous, when he suddenly relapses, his organic affections recur, and naturally the nervous depression does not fail to follow.

Continuous overwork, necessitated by the exigencies of a professional life, contributes to keep up a neurasthenic condition against which all therapeutic efforts will almost certainly fail. It is quite evident that in spite of all tonics, all regimens that we may prescribe to an individual who daily expends more than he possesses of capital energy, the latter will never succeed in keeping his nervous force at its normal level.

Similarly the various forms of intoxication, alcohol, tobacco, morphia, if not given up put an almost insuperable obstacle in the way of cure.

Certain moral conditions, very difficult to suppress, also bring difficulties in their train. Such is the case with those whose material position is precarious, ceaselessly harassed by monetary cares, with a painfully uncertain future. Such is the case with husband and wife living on bad terms with one another, always disputing and disagreeing, every contact of conjugal life serving as a pretext for emotional disturbance. Such is the case, too, with those who are overwhelmed by a grief without remedy, a sorrow without oblivion, a regret without hope. I recently had under treatment a lady who, in the space of a few months, had lost successively her mother, her husband, and her two children. All alone, in her empty house, she wept, inconsolable. What can medical treatment do to cure such an emotional

shock? Its rôle is reduced to minimising, as much as may be, the physical depression, to preaching patience and resignation, whilst waiting for time to accomplish its natural task of healing.

Finally, those attacks of neurasthenia are particularly rebellious to all treatment which supervene without motive and disappear in the same way, which I have called intermittent neurasthenia. There is in such cases an unknown mysterious mechanism which entirely escapes us and against which we are too often powerless.

By contrast, all the temporary conditions, induced by an obvious, well-defined, evident cause which has ceased to act, can and should be quickly cured. We shall revert to these later on.

In addition to the exciting cause, however, the predisposition of the patient plays a still more important rôle in regard to the prognosis to his curability.

We have seen that neurasthenia is, in fact, only the product of a normal property of the nervous system, fatigability, which becomes exaggerated in a pathological manner through a constitutional defect. The tendency to become neurasthenic will therefore, other things being equal, be bound up with the actual degree of this fatigability.

If one can admit, at any rate in theory, that all neurasthenia actually established supposes in the patient a degree, however slight, of pre-

disposition, that a non-predisposed subject will never lapse into neurasthenia, but will quickly react against the depressing causes, it is none the less true that in many subjects this predisposition is reduced to a minimum, is practically negligible. It is these patients, become neurasthenic through curable causes or causes which have ceased to act, who should be quickly and thoroughly cured.

In others the taint is more marked and cure proportionately uncertain.

And finally, again, the taint may be particularly deeply rooted and severe ; cure is impossible.

The constitution of the patient is therefore the great stumbling-block. Whilst everything acquired in a neurosis is curable, everything constitutional remains irremediably incurable. Nothing is more readily comprehensible. The hereditary stigmata inherent in the nervous system and brain, the want of balance in the psychic functions, although invisible and intangible, are no less real and material than the visible somatic stigmata of degeneration. To attempt to transform the temperament of a constitutional neurasthenic, of a congenitally apprehensive, would be as pretentious an ambition as to correct a cranial asymmetry or malformations of ears and teeth. Against such a task the resources of medicine are impotent.

If, therefore, we combine these two factors,

exciting cause and predisposition, we come in practice to several categories of patients in whom curability and prognosis differ widely.

1. The subject of a mild predisposition, become neurasthenic through a curable cause, can and should be cured quickly and thoroughly. In him treatment brings about cure after the lapse of ten to fifteen days, as I have said in my former work. "One or two weeks of cure suffice to re-establish the nervous potential of the most depressed, provided they are not hereditarily too tainted." I have nothing to alter to-day in this opinion, and all my fresh observations, gathered in the last four years, only go to confirm its accuracy.

I would add that, saving a return of the same pathogenic cause, which prophylactic hygiene taught to the patient will moreover serve to prevent, relapses are not probable.

You may therefore say to your patient, "Yes, I will cure you, if you agree to follow my directions faithfully and scrupulously. Your treatment will last at the outside a fortnight, at the end of which your symptoms will have disappeared, and you will only have to take certain precautions to consolidate the cure. As to relapses, if you follow the rules of hygiene I have laid down you will avoid them."

2. The subject of slight predisposition, become

neurasthenic from a serious and incurable cause, cannot be entirely cured.

Does this mean that we must refuse to treat such patients? Certainly not. Even though unable to effect a complete cure, treatment may bring about appreciable benefit. Diminishing the neurasthenic symptoms, it renders life more bearable to the patient. Stimulating nervous energy, it assists in a certain measure in amelioration of the general condition, in those suffering from tubercle, diabetes, Bright's disease, etc.

I have in this respect obtained remarkable results, and I am convinced that in many circumstances by raising the nervous potential one obtains for the patient a prolongation of life which is of value. Moreover, in neurasthenia due to moral causes it sustains will, perseverance, and courage, and enables the patient to bear up against his cares and griefs; it permits him at the same time to hope that, time the consoler accomplishing its task, there will come a day when the pain is past and the resources of the organism resume the upper hand, and the patient will eventually attain that condition of indifferent resignation which is the convalescence of moral disorders.

Without promising these patients a rapid cure their hope must always be sustained, since hope is one of the most powerful levers at the disposal

of medicine and one which should be utilised to the utmost.

3. The subject of a medium degree of predisposition who is not depressed in the interval between attacks may be completely cured of his crisis, but remains always subject to relapses.

Promise him nevertheless complete cure of his present neurasthenia, but put him on his guard against neurasthenia in the future. This patient, more than all the others, on account of his nervous weakness, must throughout his life practise certain rules of neuropsychic prophylaxis and hygiene suited to husband the resources of his nervous system and shelter it from fresh depressions. Give him to understand that he is delicate, fragile, and must order his life accordingly lest his future health suffer.

4. The subject of a strong predisposition, always tired and depressed, possibly relieved of his acute symptoms, but not emancipated from his chronic condition. It is difficult, if not impossible, to make his other neuropathic affections disappear.

Give these patients your best attention, but without deluding yourself with the hope of a brilliant and decisive cure. And do not let them labour under this illusion. Thus, when I undertake to treat them, if I promise, with some reserve, a relative amelioration, I hasten to add, "All

that I can do is to make you what you were before your actual attack; to hope for more would be a mistake; to attain it it would be necessary to transform your constitution, your temperament, your character, and this is a task beyond our powers."

If, however, some patients are resigned philosophically to accept this truth, this severe verdict, there are others who revolt and do not receive it without ill-humour. The latter go away to wage war upon medicine and doctors, overwhelm us with bitter reproaches, proclaim the uselessness of our profession, the ignorance of doctors, the fallibility of science.

Formerly, with less experience, I used to reproach myself with my inability to cure every patient, and was tempted to put the blame of my unsuccess upon myself. Now being enlightened by experience, I realise that if there is any one to blame it is the patient, not the physician, and that the cause of set-backs is to be looked for in him, not in me. The greatest obstacles to his cure are those that are to be sought in himself; it is his defective constitution, his morbid temperament, it is the stigmata of his nervous system which made him unbalanced and abnormal. On the occasions when I have had to meet such an attack, I have not hesitated to counter, and since truth has been attacked I have furnished a few

home truths. I have therefore replied to the patient: "It is not medicine, it is not the doctor that should be reproached with your incurability. It is yourself, or even more your ancestors, who bequeathed to you all the sequelæ of their acquired diseases, the consequences of their greed, of their faulty hygiene, of their ill-assorted marriages, dictated by interested motives, by pecuniary conventions. Therein lies the true cause of your incurability, not in our ignorance. We only possess human powers; to cure you they had need be superhuman, a complete transformation of your body and brain. Why did your progenitors fashion you so badly? You are a broken-down machine; you should be taken to your makers, not to the repairer who cannot remedy the inherent faults of your construction!"

Thus I counter with truths which sometimes have a comforting effect when spoken. And upon a similar subject, let me repeat a remark made by one of my eminent colleagues, one of the masters of French psychiatry. This professor was one day interviewing in his consulting-room a haughty and pretentious gentleman, puffed up with foolish pride, who had brought his son, a very backward boy, with the simple request that the physician should instil a little intelligence into him. On receiving a discouraging prognosis the father remarked: "But then, doctor, what is the

use of your science and your titles if you are not even capable of improving my son?" The doctor replied: "They enable me, sir, to say that if you had not had syphilis, your son would not be an idiot."

5. Finally, the subject of periodic attacks, supervening without obvious cause, cannot by any treatment be cured of his crisis. Luckily this is generally cured spontaneously, but it must be borne in mind that a return of such symptoms is the rule.

Undertake a course of treatment in such a case, but without great hope and, above all, without vain promises. And if, after some time, no improvement appears, do not persist, whilst assuring the patient of his spontaneous cure in the future.

In spite of these indications, which I have made as precise as possible, there are many cases where it will be found difficult to establish a prognosis. In these there is only one course which will lead to enlightenment—the therapeutic test. Institute treatment and see what the result is.

In this respect strychnine may supply us with useful indications. Strychnine is not only a remarkable therapeutic agent, but it serves also as a test for prognosis. If the subject reacts, feels better after the injection, one may expect

cure after a short time. Thus I have been enabled to predict the cure of patients, despite their profound depression, from the euphoria produced by the drug. On the other hand, if the patient does not react, prognosis must be reserved and one must be cautious in promising a cure.

I now propose to add a few observations in support of all the preceding considerations, which serve to confirm them by showing the *results of treatment.*

From the point of view of the results obtained I shall divide these observations into three classes :—

1. Neurasthenic patients completely cured.
2. Neurasthenics only improved.
3. Neurasthenics refractory to all treatment.

As the interest is here, not in the clinical symptomatology, but in the effects of treatment, the observations are condensed so as only to retain the essentials.

I. PATIENTS COMPLETELY CURED

There are, as we have seen, two conditions necessary in order that an attack of neurasthenia may be completely cured : on the one hand that there should not be too strong a predisposition, on the other that the exciting cause of the depression shall be accessible and curable by the means at our disposal.

Into this class come all those patients, normal enough otherwise, not too neuropathic or unbalanced, in whom overstrain, emotions experienced, curable digestive, genital, or urinary disturbances, convalescence from an infectious disorder such as influenza, or a temporary weakness have induced an attack of neurasthenia.

Into this class we must introduce two subdivisions: that including those patients who are completely cured without relapse, and that of those patients who have been entirely cured, but who have subsequently been subject to fresh attacks of neurasthenia.

These relapses may depend, it is true, upon extrinsic circumstances, upon the type of life led by the patient, which place him to a greater or less degree in depressing conditions, but they depend above all, as we have seen, upon the degree of resistance offered by the nervous system. If an extremely resistant nervous system will only very exceptionally give way for very grave reasons, a less resistant one will be depressed from very trivial causes, *e.g.* period of overwork, great worry, dietetic imprudences, etc. It need not, therefore, cause surprise if those who are moderately predisposed relapse with greater readiness into neurasthenia. This will be demonstrated by the clinical examples which I now adduce.

A. *Without Relapses*

All the cases coming into this category have been followed from their cure up to the present time. As this interval extends over several years, I may be permitted to assume the absence of relapse.

I. Mr. C., aged 35, consulted me in April 1903 for a state of fatigue, of gloom, of discouragement, with insomnia and exaggerated emotivity.

He told me that for eighteen months he had been subject to great strain from overwork, connected with preparations for a meeting which fell through three months before this time. His depression since then had been profound. He could not eat or sleep, and had to give up work.

I put him under energetic tonic treatment, with prolonged rest, super-alimentation, strychnine, and appropriate psychotherapy. At the end of twelve days he was cured and able to resume his work.

II. Miss C., student, aged 22, became neurasthenic as the result of preparation for examination. Fatigue and depression were profound. She not only had to give up her studies, but was incapable even of reading a newspaper. At the end of ten days' treatment she was completely cured and able to resume work (April 1905).

III. Mr. X., financier, through unlucky speculation, lately lost the whole of his fortune, as well as that of his wife. His despair, disappointment, and prostration were inexpressible. A constant apprehension gripped him by the throat and tears rose continually to his eyes. Weeping, he disclosed his

position to me, as melancholy in retrospect as for the future, for, said he, a suitable position which had been offered him and which would enable him rapidly to repair his fortunes, was about to pass out of his reach because he was incapable, from his neurasthenia, of providing the necessary work and energy.

I instituted physical and moral treatment. A fortnight later my patient, having recovered his will and his aptitude, entered upon his new duties, which he has courageously carried out since that date (June 1904).

IV. Mr. P., aged 38, passed through a phase of depression, which mainly affected him by weakening his virility. He was cured by ten days' treatment (February 1905).

V. Mr. B., aged 52, an official, consulted me on December 8, 1910, for a state of depression lasting four years. There was continuous fatigue, worse on rising in the morning; distressing prostration, headache "en casque," repugnance towards all effort, physical or intellectual; depression of spirits, ennui, restlessness, fear; loss of memory and power of concentration; insomnia.

Examination disclosed dilatation of the stomach. This patient has already undergone several cures, notably by persuasive psychotherapy, without result.

I prescribed dry diet, rest after meals, long rest in bed, hot Vichy water in the morning, with injections of strychnine and codeine phosphate and psychotherapy. By December 10 there was already some improvement. December 15, no prostration; slept well. On December 20 he sang, the first time for a long while. December 23, a perfect day, without any trouble. December 25, considered himself cured.

VI. Mr. S., aged 46, fell into a state of depression

following great family trouble. Fatigue, depression of spirits, exaggerated emotivity. Faulty nutrition, insomnia. Cured in a fortnight (October 1907).

VII. Mrs. A., shopkeeper, had suffered from depression for six months, with morbid ideas, and insomnia, which I attributed to faulty alimentary hygiene. Cured in eight days (February 1907).

VIII. Mr. C., aged 36, following grief, suffered from depression, anorexia, insomnia. In ten days he was eating, sleeping, and had recovered his capacity for work (January 1907).

IX. Mr. R. H., aged 26, had been neurasthenic for seven years, following overstudy, according to him. Very painful occipital headache. Exhaustion in the morning, insomnia, difficulty in working. Cured in ten days (December 1908).

X. I was asked to see, November 18, 1910, a girl of 18, tall, pale, thin, profoundly depressed, so much so that I almost thought of an attack of melancholia. I ordered dry diet, prolonged rest, iron, arsenic, strychnine. By November 28 she was already much better, by December 2 still more so. On December 7 the periods, which had been in abeyance for six months, made their appearance. On December 15 she was well. In March I saw the patient again, when she considered herself cured and had gained 10 lb. in weight.

XI. Mr. C., an officer, aged 26, was groundlessly certain that he had had syphilis four years ago, and having seen a syphilitic die six months before from general paralysis, was much impressed by this event and fell into a condition of profound depression. Exhaustion, headache, general weakness, digestive troubles, depression of spirits, restlessness, ennui, insomnia. His doctor prescribed a vegetarian diet,

and he went from bad to worse. He was unable to do his work and had had to apply for leave. He had lost 24 lb. in six months.

I prescribed dry diet, Vichy water, excess feeding with eggs, sweetened drinks, long rest, daily injections and psychotherapy.

At the end of three days (March 18) the patient slept well, had no more headaches nor vertigo. By March 23 there was no more exhaustion, and he was in good spirits. By April 19 the patient had put on 3 lb., was feeling well and cured.

XII. Mr. B., following upon too severe a mineral water cure, accompanied by an insufficient dietary, became neurasthenic, with change in disposition, gloominess, irritability, etc. Cure in eight days.

B. *With Relapses*

XIII. Mr. Q., aged 26, architect, had already passed through a neurasthenic crisis in 1905, following overwork. He was cured after six months' rest. In 1907 came a second attack, from the same cause, which I cured with a fortnight's treatment. Four months ago he had to go through a fresh period of overwork. He came back on September 30, 1908, with a sensation of cerebral emptiness, fatigue, difficulty in focusing his attention and incapacity for work. I cured him again.

XIV. Mr. P., aged 46, worked too hard, and in addition had deplorable alimentary habits : irregular meal hours, insufficient mastication, alcohol. Hence were arising depression, fatigue, emotivity. I cured him in eight days (March 1907). The following year, having resumed his bad habits, there was a relapse. I cured him afresh. In 1910 came another relapse

and another cure. So long as this patient does not submit to severe physical and mental hygiene he will not escape from these relapses.

XV. Mr. F., aged 38, suffered six months ago (December 1908), following overwork and worry, from vertigo and even syncope; depression, distress, irritability; stomach dilated, liver enlarged and tender. Submitted to treatment he recovered.

In 1909, however, with fresh worries and return of digestive disorder he had a relapse; fresh cure.

In 1910 reappearance of the same symptom, renewed successful treatment.

XVI. Mrs. T., aged 29, was the wife of an official, and intensely bored in the little provincial town where she was condemned to live. Her delicate physique predisposed her to neurasthenia, to which she succumbed. I cured her for the first time in 1910, but little by little, after the lapse of several months, she gave way anew under stress of the boredom which overwhelmed her. She was once more cured, but such relapses will only be avoided by a change of residence.

XVII. Mrs. F. was subject to attacks of muco-membranous enteritis, supervening in the spring, doubtless consequent upon repeated dining out. Each time that the enteritis shows itself it is accompanied by depression, loss of spirits, ill-humour, restlessness, etc. I cured the attack by treating the enteritis and by nervous therapeutics. But relapses are certain so long as the patient is guilty of these dietetic indiscretions.

XVIII. Nothing is more exhausting than the life of a society woman whose day is taken up by a succession of elaborate toilettes, visits to the dress-makers, five-o'clock teas, receptions, dinner-parties,

theatres, soirees, and suppers. The most robust man would become neurasthenic under such conditions, and if the majority of women of fashion are overtaken by this neurosis, it is only surprising that more are not so.

Mrs. M. pays a large tribute to neurasthenia. She wakes tired and uncomfortable, suffers from continual exhaustion, distress, insomnia, and all the symptoms of nervous exhaustion contribute to her sensations of discomfort. Moreover, certain signs detracting from her good looks, such as dark rings under lustreless eyes, a muddy complexion, dejected appearance, are infinitely humiliating to her vanity. She came to me, several times in succession, for daily treatment, and soon recovered her normal spirits simultaneously with the disappearance of the neurasthenic stigmata. Soon, however, under the influence of her social life, the lassitude gradually reappeared. This patient will always remain subject to relapses into neurasthenia so long as she fails to relinquish a mode of existence too strenuous for her nervous strength.

II. PATIENTS MERELY IMPROVED

The obstacles to a complete cure of the neurasthenic state arise either from too great a fatigability of the nervous system, a constitutional deficiency, or from an exciting cause beyond the reach of our therapeutic measures.

We shall recognise such conditions in the following records :—

XIX. Mrs. G., aged 28, is a weakling, a debilitated subject. She has suffered from puberty onwards from

continuous lassitude, with a mental condition of sadness, ennui, and excessive impressionability. In spite of a very energetic course of tonic treatment, which diminished the symptoms, I did not succeed in causing them completely to disappear.

XX. Mr. F., aged 36, was the subject of incipient tabes of very gradual onset; lightning pains, gastric crises, abolished reflexes, etc. He suffered in addition from a state of neurasthenia, with distress and various phobias.

I succeeded temporarily in improving his condition under the influence of treatment, but gradually his depression became accentuated afresh. I have on several occasions recommenced cures without ever succeeding in entirely removing the depressive symptoms.

XXI. Mrs. M. was attacked by bony tuberculosis with a condition of depression. Each of my courses of reconstituting treatment produced a very marked amelioration of the nervous phenomena, but I never succeeded in effecting a return to a normal condition.

XXII. Mr. P. is an exaggerated constitutional neurasthenic with symptoms of emotivity, distress, phobias, obsessions, doubts, scruples. He lives in a chronic state of depression, of lassitude, of gloom, of misanthropy. My treatment improved him temporarily, but after a little time he fell again into his condition of asthenia, which is for him the normal.

XXIII. Mrs. K. lost within the space of a few months her husband, two children, and her mother. In her empty house she lived in a state of prostration and profound grief. Treatment improved her temporarily, but did not succeed in lifting her out of the depths of sadness in which she had been plunged.

III. PATIENTS COMPLETELY INCURABLE

Under this category come the exaggerated constitutional neurasthenics, who do not react at all under the influence of tonic medication, intermittent neurasthenics who have periodic accessions of neurasthenia without apparent cause, and finally those depressed through some fatal organic cause, such as tuberculosis or general paralysis. The following are some examples :—

XXIV. Mr. W. was a born neurasthenic, afflicted with a host of psycho-neuropathic symptoms: phobias, impulses, instability of character, etc.

He came asking to be relieved of his exhaustion, his incapacity for work. Three weeks' treatment brought about no result. Perseverance was useless.

XXV. Mr. D., 25 years of age, very degenerate, with asymmetrical skull, intractable disposition, complained of being always tired, losing his memory, and being unable to work. He suffered also from digestive disorders, which I improved by dieting. In spite of this improvement, and a course of neuro-tonic treatment, there was no modification of his nervous state.

XXVI. Mr. P., aged 53, always tired, suffered from gloominess, restlessness, phobias, ideas of suicide, impulsive manias. Numerous forms of treatment which have been tried have all been fruitless. I have experienced the same result.

XXVII. Mr. D., aged 27, small, poorly-developed, weak-minded, has complained since puberty of a continual sensation of tiredness, of various pains, of headache, of incapacity for work.

These symptoms are all refractory to treatment, of whatever nature, whilst as to psychotherapy, he does not even seem to understand the words I address to him.

XXVIII. Mr. Z., aged 35, sallow, thin, his face lined and precociously senile, has been afflicted from the age of 16 with fatigue, depression, morbid introspection, apathy, and lack of will-power. The many treatments tried have none of them produced any improvement.

XXIX. Mrs. X., aged 40, had her first attack of depression eight years ago, for no known reason; it resisted all forms of treatment and disappeared spontaneously in ten months. Four years after there was a fresh attack, without cause, which also lasted ten months. Two years ago came a third attack which has never left her. I have treated her without result, and advised her to await patiently the end of the attack, which will come spontaneously.

XXX. Mr. M., aged 70, has been the victim, since 1870, of attacks of simple depression, supervening without cause at irregular intervals and lasting one, two, or three months, then disappearing spontaneously and rapidly. The actual attack has lasted two years, with depression and fatigue; sleep and appetite are unimpaired. No result obtained from treatment.

XXXI. Mr. F. had, eighteen months ago, an apoplectic seizure; since then depression, exhaustion, gloominess, exaggerated emotivity. He has proved rebellious to all treatment.

XXXII. Mr. Y., aged 42, was sent to me with the diagnosis of neurasthenia. I examined him carefully and, finding no organic symptoms, recommended a rational course of treatment. At the end of a fortnight there was no improvement. The patient was

then advised to rest in order to undergo a fresh cure at the end of a month. He was brought back to me on the date agreed upon, when I made out a very slight hesitation of speech and pupillary inequality. The diagnosis of general paralysis was made, and the patient died six months after during an epileptic seizure.

CHAPTER XIV

COURSE TO BE FOLLOWED IN THE TREATMENT OF A NEURASTHENIC

THIS last chapter will only be the synthesis and epitome of all those which have preceded it. We will deduce therefrom the therapeutic behaviour of the physician towards the neurasthenic.

The best course will be to describe my own practice in such a case.

In the first instance I determine my diagnosis of neurasthenia by proceeding in the manner indicated in Chapter VI. I may recall the fact that this diagnosis rests upon three sources of information which are drawn upon at three successive stages: of listening to the patient, interrogation, organic examination.

When a patient comes to see me I begin by asking him to give me an account of his symptoms, to relate the history of his trouble. I listen attentively; whilst watching him, I interrupt as little as possible, and then only in order to get further information upon details which he explains

badly. I note the main points of his confession, which already influences my opinion in a certain direction. Then I interrogate him. I put to him all the questions which we have already dealt with relative to the main neurasthenic symptoms. I also question him concerning the principal signs of other neuroses which he might have forgotten in his recital.

I then proceed to a careful and minute examination, without haste ; I pass all his organs in review, I test all his functions.

If any member of his family is present at the consultation I interrogate him in turn upon the character of the patient, the changes which have taken place in it, his nervous condition, his habits, his inclinations.

Finally I order the urine to be collected for twenty-four hours and a complete examination to be made.

This study of the patient is a somewhat lengthy proceeding ; it occupies, so that it shall be done without haste, nearly an hour's time. If one feels hurried it is better to defer it in part to another occasion when the necessary time may be set apart. Generally speaking, the patient quite understands the necessity for this precaution and gives credit to the practitioner for his desire to be exact.

Having come to the end of my examination,

I ask the patient to dress himself again. Whilst he is doing this I take my seat at my table and reconsider my impressions. I make a note upon a form of the principal symptoms elucidated. I formulate my diagnosis, particularly the causal diagnosis. Last of all I consider the question of treatment. I now have to regulate my therapeutic campaign, a term which is not out of place applied to a complete treatment designed simultaneously to combat the causes, symptoms, and complications of the neurosis.

I endeavour in the first instance clearly to mark out the predisposing causes: heredity, general debility, arthritism, auto-intoxication. Against heredity we are powerless, but by means of rest, excess feeding, tonics, open air, etc., we can combat weakness, just as by strict diet, physical agents, etc., we combat the disorders of metabolism. This is the first category of therapeutic indications which we have to lay down.

Then I define the exciting cause or causes: dyspepsia, emotions, to begin with the most frequent, chronic disease, etc., and each of these brings with it the necessity for corresponding measures. Primary asthenia will call for treatment by rest and nervous tonics.

Finally, the predominant symptoms or complications will demand special interference.

These forms of medication in their entirety

constitute indeed a plan of campaign in which the patient and the physician must collaborate in order to ensure success. I quickly outline it in my own mind and prepare to impart it to the patient. The latter, whilst I have been reflecting, has been dressing himself and sits down close to me. Now he has to listen and it is my turn to talk.

I begin by telling him that he is neurasthenic; I explain in a few words what neurasthenia is, in order to destroy any false conceptions that he might have. I impress upon him that these affections make it imperative that he should strictly follow the directions that I am about to give him.

My usual directions are threefold in nature:

(A) The directions that the patient will have to follow at home and on his own account. These will always be:

1. Diet, appropriate either to the general debility (superalimentation), or to the dyspepsia, or to the intestinal trouble.

2. Rest after each meal.

3. Warm hydrotherapy, by means of sponging, shower, or spray.

4. General hygiene; long hours in bed, economy of effort, etc. If the patient is an arthritic he should be ordered a mineral-water cure, dry heat, massage, fasting, purgation, etc.

Whilst I am explaining these directions I simultaneously write them out upon a sheet of paper, which the patient keeps, and which constitutes the programme of his treatment. I later on add the directions.

(B) The second portion of the plan includes the medicinal prescriptions, iron, arsenic, bromide, opium, cannabis indica, according to the case. I write these upon a second piece of paper, which is to be the order to give to the chemist.

(C) The third part constitutes the applications which I carry out myself: electrotherapy, hypodermic injections, psychotherapy.

The last are undoubtedly the most important, because they enable me to have the patient back daily, to carry out direct and personal treatment, and to pursue my psychotherapy.

All this plan is laid before the patient.

It then often follows that he parries with this question, "How long is this treatment going to last?" The actual nature of his neurasthenia permits me to answer, if I have to deal with an accidental neurasthenic in a slightly predisposed patient, that I shall require ten to fifteen days to effect a cure; it is rarely that I fail to fulfil my contract. If I have, on the contrary, to deal with a predisposed subject, or with an incurable cause, I honestly express my doubts; whilst allowing an

improvement to be looked for, I avoid promising a definite cure.

Thus enlightened, the patient accepts or refuses my propositions. He makes an appointment for the following day or asks to be allowed to think it over.

If he returns I daily repeat my curative tactics, adapting my behaviour and words to the necessities of the moment. Whenever I can I administer a dose of electricity. Then, with the patient comfortably installed in an electrotherapeutic chair of my own designing, I make and repeat all the reassuring, encouraging, curative suggestions that I think necessary. I answer the questions he puts to me, and even those he does not put, but which I guess. Thanks to these quiet twenty-minute conversations, I keep control of him and lead him towards a cure. I may add that these repeated sittings are often very necessary to elucidate a number of points which a first examination is inadequate to settle. In these neuroses where there are such subtle shades of difference, one cannot have too many investigations and interviews. Finally, when the treatment is finished, I once more formulate and write out the prophylactic precautions to be taken in order to avoid relapses.

Such is the line of conduct which, after many trials and much groping in the dark, I have

adopted in the case of neurasthenics. Doubtless the treatment I have outlined will not cure all patients, but if my directions are faithfully followed, I think they will lead to the maximum of results which we can hope for in the present state of our therapeutic resources.

CONCLUSIONS

1. One may consider as neurasthenic every individual habitually suffering from *simple nervous depression* (in order to distinguish it from melancholia, in which the depression, when it exists, is always accompanied by marked moral pain).

2. The symptoms of neurasthenia are expressions of this nervous asthenia, in the bodily domain taking shape as fatigue, motor weakness, sexual frigidity, etc., in the psychic domain as loss of power of concentration, of memory, of will, of capacity for work, as depression of spirits, boredom, etc.

To these signs of insufficiency must be added those of irritability which are their corollary: hyperæsthesia, headache, rachialgia, exaggerated reflexes, insomnia, hyper-emotivity, etc.

3. One becomes neurasthenic from two varieties of causes. On the one hand, from exciting causes, such as infectious diseases, chronic visceral disorders, digestive disturbances, overwork, emotions, which have the effect of exhausting or poisoning the nervous system. On the other hand, pre-

disposing causes, inherent in the constitution, whether it be a case of general debility, or of an arthritic auto-intoxication reacting upon the nervous system, or whether a congenital stigma indicating degeneracy. All these predisposing causes lead to a diminution of resistance on the part of the nervous system which renders it more vulnerable to exciting causes.

4. Thus understood, neurasthenia must be considered as the exaggeration of a normal property of the nervous system : fatigability.

In the completely normal subject, with great powers of nervous resistance, neurasthenia never appears, because the state of fatigue is rapidly repaired by rest. In less resistant subjects all extrinsic or intrinsic causes leading to changes in the nervous system, such as strain, digestive disorders, intoxications, infections, emotions, unknown disturbances, can create a state of neurasthenia which ordinary rest will not repair. These are the cases of accidental neurasthenia.

In very inadequately resistant subjects the mere accomplishment of the organic functions, digestion, circulation, respiration, nutrition, demanding an expenditure of energy which the nervous system cannot meet, suffices to keep up a state of constant fatigue and depression : these are the cases of chronic constitutional neurasthenia.

5. Thus considered, neurasthenia is an affection of organic nature and all its symptoms are by no means auto-suggestive or imaginary.

6. The neurasthenic state may be accompanied by various psychic disorders: phobias, obsessions, auto-suggestions, which are not real symptoms of it, but complications supervening in predisposed subjects according to the pathogenic law which I have formulated: "The neurasthenic condition exaggerates all the morbid tendencies of the character."

7. Neurasthenia, therefore, must be clearly distinguished from phobias, obsessions, auto-suggestions, from melancholia and hypochondriasis.

8. The treatment of neurasthenia must be a triple one. On the one hand, it must be pathogenic and must combat all the predisposing or exciting causes which brought about the state of depression: debility, arthritism, digestive disorders, infections, intoxications, moral conditions, etc.

On the other hand, it must deal with the primary depression by means of rest and tonics, and with the mental state by means of psychotherapy.

Finally, it must combat more particularly the obstinate and prominent symptoms, such as headache, migraine, vertigo, etc., as well as the secondary complications.

9. The curability of neurasthenics is dependent, on the one hand, upon the degree of constitutional resistance of their nervous systems, on the other hand upon the severity and curability of the exciting causes which have brought about the disease.